Clinical Lecture
ON
CASES OF EFFUSION INTO THE PLEURAL CAVITY.

Delivered at St. Mary's Hospital, Jan. 10th, 1882,

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GENTLEMEN,—We have in the hospital two cases of pleurisy with effusion, both on the left side, and both treated by aspiration; and it has been announced that they are to be the subject of my lecture to-day. I am really, however, going to repeat, with some slight additions, a clinical lecture which I gave in October, 1878, because these two cases illustrate in a new way a certain point to which I then called attention. Then, as now, there were two cases under observation, but in one of them aspiration was performed, while in the other it was not, and the fluid was rapidly absorbed. What I endeavoured to bring out were, my reasons for adopting a different practice in the two cases, and the grounds on which I was enabled to predict the absorption of the fluid in one of them. Since then I have always acted on the same considerations, and they have scarcely ever failed to guide me to a just conclusion. I will first briefly relate the two cases of 1878, from notes taken by Mr. Tucker and Mr. D. A. Fraser.

George J——, a stableman, aged thirty, was admitted into St. Mary's Hospital on Sept. 13th, 1878. He had enjoyed good health up to three weeks before, when he had a slight cough and some pain in the right side, and felt weak. He had noticed shortness of breath for four days. On admission he was flushed, the skin felt hot and dry, the temperature was 100°, and the pulse 108. He had pain in the right side and back, slight cough, with scanty, viscid, yellowish expectoration, and shortness of breath. The right half of the chest appeared full, and, when examined, was found to be dull on percussion from top to bottom in front and behind; the mediastinum and heart were displaced to the left, so that the apex beat was felt an inch beyond the nipple-line; no respiratory murmur was audible, nor any tubular breathing, except between the scapula and spine; vocal resonance was muffled and became very feeble towards the base of the lung, and all vibration was extinguished; there was some dulness, with exaggerated vocal vibration, at the left base. The physical signs remained much the same for the next four days, the temperature ranging from 102° or 101·4° in the evening to 100° or 99·5° in the morning. On the 18th the right chest was aspirated, under my supervision, by Mr. Prowse, the resident medical officer, 112 oz. of fluid being removed. There was cough for a quarter of an hour, but the patient was greatly relieved; the heart returned to its normal position; and next day, on examination, there was fair resonance over the entire front of the right chest, and respiratory murmur was audible. The temperature, however, did not fall; and on the 21st there was dulness below the fourth rib in front and the spine of the scapula behind, with friction sounds along the line of junction of resonance and dulness. A week later the fluid rose a space higher, although the strength improved; and it was not till the end of October that the physical signs gave evidence of decided subsidence. He left the hospital on Nov. 15th, having still imperfect resonance and entry of air over the lower part of the right lung.

Thomas B——, a tailor, aged twenty-nine, was admitted into St. Mary's Hospital on July 12th, 1878. He had never been very strong, and had had slight attacks of acute rheumatism and enteric fever. Three weeks previously, after being out of sorts for some time, he had rigors followed by profuse perspiration, lost his appetite, and, gradually becoming worse, took to his bed ten days before his admission, complaining chiefly of pain in the left side, especially on taking a breath. When he came under observation he was feverish, the temperature being 100° and the pulse 100; the skin was perspiring, the tongue dry and coated. Urine: sp. gr. 1025; acid; no albumen. He was suffering from pain in the left side, shortness of breath, and inability to lie on the right side. On examination, the left side of the chest was seen to bulge somewhat, its movement was imperfect, it was universally dull on percussion, and the heart was displaced to the left, so that its impulse was lost and the sounds feeble at the normal situation, while pulsation was visible below the right costal cartilages and felt to the right of the lower sternum. True respiratory murmur was entirely absent, but in its stead distinct tubular breathing was heard over both front and back of the chest down to the lower part, and the vocal resonance was ægophonic; vibration was extinguished. Iodide of potassium, with ammonia and bark, was ordered; and iodine was painted over the left half of the chest. He soon felt easier, and already on July 16th the cardiac impulse had disappeared from the right intercostal space. On the 20th there was some return of resonance below the clavicle and above the scapula. On the 26th the three upper intercostal spaces were resonant, and this improvement gradually progressed; respiratory murmur was slow to appear, and as the dulness receded a loud creaking friction sound was developed. He was discharged on Sept. 20th, the lower part of the left chest still remaining rather dull.

Before I can ask you to follow me in the reasons why one case was aspirated and the other not, I must enter for a moment upon the physical signs of effusion into the pleural cavity. These, as has been set down in the records of the cases, are chiefly dulness on percussion, absence of respiratory murmur, more or less bronchial breathing and voice with perhaps ægophony, absence of vocal vibration, and, when the amount of fluid effused is large, displacement of the heart, mediastinum, and diaphragm. Nothing can be more simple and easy, as a rule, than the diagnosis of effusion into the pleural cavity. We must, however, follow the development of the signs just enumerated, and we will suppose the lung to be free from consolidation. As, then, effusion takes place, the lung of course floats upon the fluid, but not like a loose piece of cork. In the first place, it is attached by the root to the mediastinal wall of the cavity; and secondly, as the fluid accumulates, it shrinks, in virtue of its elasticity, in all its dimensions, transversely therefore towards the mediastinum as well as vertically, which will tend to withdraw the lateral surface immediately opposite the mediastinum from the chest-wall. In consequence of this the line of dulness is not horizontal, and does not shift in position with changes of posture to the degree which you might anticipate, and which we are led to expect by some books. The lower part of the lung is immersed to a certain depth in the fluid, and this rises for a short distance between the lung and the chest-wall, especially at the axillary aspect in the erect position of the trunk, while when the patient is on his back the line of dulness is curved, descending rapidly from the front of the chest at its lower part to the axillary aspect. There is a great difference in these respects from pneumothorax with fluid; the lung in this condition is shrunken and out of the way, and the line of dulness is level, and varies with the position of the body. As the fluid increases the last parts of the chest to remain resonant are the supra-scapular and infra-clavicular regions, the former in the erect the latter in the recumbent position, and below the clavicle the percussion note is usually tympanitic, often remarkably so, the well-known Skodaic resonance, a fact which should be borne in mind; it is due no doubt to the flaccid condition of the lung and its compression against the chest-wall at this part. Finally, the fluid increasing there is universal dulness with displacement of the mediastinum and neighbouring organs. Up to a certain point there is no positive pressure on the lung. When air is admitted into the pleural cavity the lung shrinks in virtue of its elasticity, and not only is this the case, but the mediastinum is drawn to the opposite side by the elasticity of the other lung, as has been shown by Dr. Douglas Powell, so that the heart is slightly displaced, and even the diaphragm will rise less in expiration. Until, then, sufficient fluid has accumulated to allow of an equal degree of collapse of the lung and displacement of the mediastinum to that which takes place in Dr. Powell's experiments, there will be no actual pressure upon the lung, and it will expand during inspiration and yield a vesicular respiratory murmur. Breath-sounds consequently are audible over any area remaining resonant, but they are feeble and are soon lost on passing to the region of dulness. As the compression increases, no air can enter the lung and respiratory murmur ceases to be audible, but tubular breathing may be heard;

not, however, from rush of air into and out of the bronchi of the compressed lung, but produced by the play of the current of air in the tubes of the other lung across the mouth of the bronchus of the affected side. This tubular breathing is mainly heard between the scapula and spine, and is not audible near the base of the lung or on the antero-lateral aspect of the chest, because the ramifications of the bronchi are closed by the compression of the lung. A characteristic physical sign, the most important perhaps of all, distinguishing effusion into the pleural cavity from consolidation of the lung, which also gives rise to percussion dulness, is the absence of vocal vibration. Fluid extinguishes the tremor communicated by the male voice to the chest-wall, while a solidified condition of the lung intensifies it. The case first read conformed in every particular to the account just given. The lung had receded before the fluid, leaving room for the five pints and a half which were removed, and expanding so as to give resonance over a great part of the chest when it was withdrawn.

I must now point out why, in the second case, paracentesis was not performed. I have spoken of the lung contracting and receding as the fluid is effused, but this is not always the case; the lung may be more or less consolidated by congestion or pneumonia, and in proportion as this is the case (1) it will not shrink, and (2) it will not float. This being so, you will see that when the pleural cavity is partially full the lung will be more deeply immersed in the fluid than if it allowed itself to be compressed, and when quite full the lung will still be everywhere nearer the chest-wall. Under these circumstances the bronchial tubes being prevented from collapsing by the solidified lung, the solid lung conducting the sound produced in them, and being surrounded by a comparatively thin layer of fluid, bronchial breathing, which in the first class of cases is heard only for a short distance from the interscapular region, is audible over a great part of the chest. This was exactly the state of things in the second case related. Tubular sounds were heard almost all over the left thorax, and with unusual distinctness anteriorly. So far as I know, M. Potain was the first to point out the significance of tubular breathing heard over the entire chest in effusion into the pleural cavity; it was from him, at any rate, that I learnt it. You will at once see the important corollary which has influenced our treatment. It is evident that when the lung is thus large and solid the amount of fluid in the pleural cavity must be less than when it has collapsed; less relief is therefore to be expected from its removal; the consolidation, again, is probably the primary and the more serious condition, and this we should leave untouched. Moreover, the lung cannot expand, and in addition to the probable distress caused by aspiration, mischief may be set up in it or around it, perhaps resulting in empyema.

Another very important consideration is that while on the one hand the operation promises less, experience has shown on the other that in these cases absorption is often rapid. A prediction of probable early diminution in the amount of fluid was made in the first case, and justified by the event, return of resonance being noted on the eighth day after treatment was begun. Of course aspiration would have been practised had there been urgent symptoms or long delay in the absorption.

So much for the cases of 1878 and the comments made at that time upon them.

The two cases now under observation are both examples of the condition last described—i.e., in which the consolidated lung is deeply immersed in the fluid filling the pleural cavity. We were, however, compelled to tap the chest, and had not therefore the opportunity of seeing the fluid resolved, which I have told you is usually the case; but while we lost this we were enabled to verify the diagnosis of consolidation of the lung arrived at from the presence of tubular breath-sounds audible over nearly the whole of the affected side of the chest. This was best shown in the case admitted last, and I shall therefore relate it first, from the report of Mr. Alfred Tilly, clinical clerk:—

The patient, a bricklayer, Thos. B——, aged forty-three, was admitted Dec. 22nd, 1882, on account of shortness of breath following pain in the left side. The pain in the side had come on, together with a cough, three weeks previously, from a chill. It was worse when he took a deep breath or coughed; shortness of breath soon followed. On admission the cough was still very troublesome, and he expectorated a moderate quantity of viscid mucus; there was not much pain, and breathlessness only came on on exertion. The temperature was high, the pulse frequent (120), tongue coated, appetite bad. Dulness was absolute over the entire left chest, the vocal resonance was ægophonic, vocal vibration completely extinguished—indications that the pleural cavity was full of fluid; but loud and distinct tubular breathing was heard over the front, on the lateral aspect down to the seventh space, and posteriorly almost to the lower limit of the thorax. This, you remember, is the sign from which we conclude that a large solidified lung is deeply immersed in the fluid. The heart was not at this time greatly displaced. There was dulness also at the base of the right lung, and over a great part of it sibilant sounds were heard. During my absence for a few days at Christmas he was under the care of my colleague, Dr. Shepherd, and when I next examined him on December 27th the fluid had increased, as was shown by displacement of the heart further to the right; it was now felt beating in the right fifth space. In other respects the physical signs remained the same, the tubular breathing included. The cough was still troublesome, and the expectoration was streaked with blood. Over the right lung posteriorly there was impaired resonance and imperfect entry of air from the spine of the scapula downwards. The febrile condition continued. I should have preferred to postpone the tapping in the expectation that the fluid would undergo absorption; but, although there was no marked dyspnœa, I did not think this safe in the presence of such extensive congestion in the right lung, accompanied as it was with bronchitis in the smaller tubes and attended with blood-streaked expectoration. Aspiration was therefore performed by Mr. Louis Wood, my resident medical officer, and about seventy ounces of fluid were drawn off; not a large quantity, you will remark, for the size of the chest. The patient was relieved and is going on well, though the temperature continued for a time to rise at night, and the chest has by no means yet returned to a normal condition. The point to which I desire to call your attention, however, is that the withdrawal of the fluid gave us additional and conclusive evidence of the consolidation of the lung. Where the lung has been simply compressed the removal of the pressure allows it to re-expand, and either at once or in the course of a day or two there is return of resonance at the upper part of the chest; or if the lung is bound down by adhesions so that it cannot expand, the persisting dulness is the dulness of fluid, and is unattended by vocal vibration. Now, in our patient the aspiration did not bring back resonance, the chest remained universally dull; but although dull on percussion, there was exaggerated vocal vibration over the entire front and lateral region of the affected side of the chest, and posteriorly down to the angle of the scapula—that is, the absence of fluid had allowed the consolidated lung to come into contact with the wall of the chest. Moreover, as resonance has returned it has not been from above downwards; it was first recognised in the fourth space just above and to the inner side of the nipple, and from this point it rapidly extended round the lateral aspect of the chest to the back, the apex remaining dull on percussion. With the return of resonance the vesicular breathing was re-established, and for a short time the lower lobe of the lung gave almost normal physical signs, except quite at the base, while the upper lobe was still consolidated, as shown by dulness on percussion, tubular breathing, and exaggerated vocal vibration. The apex cleared up later.

The second case (reported by Mr. Allen) was that of Henry B——, aged thirty, a butler, admitted Dec. 6th, 1882. He had been ailing for three weeks, and complaining for a week of shortness of breath and pain in the left side. The left half of the chest was found by the resident medical officer, Mr. Louis Wood, to be full of fluid, but the heart was not much displaced. The evening temperature was 102°, the pulse 86, small, long, and weak. On Dec. 8th, the fluid had increased, as the heart was carried further to the right. Tubular breathing was heard over the entire left chest, and ægophony was present posteriorly. The bowels were acted upon by a mercury and colocynth pill, and iodide of potassium, carbonate of potash, and bark were given. No diminution of the fluid was observed; the temperature sometimes rose to 103° at night, and was usually above 102° in the evening, and there were night-sweats. First sonorous rhonchi and then sibilant sounds were heard over the right lung, so that we were reluctantly compelled to tap him on Dec. 20th, sixty-eight ounces of dark-coloured serum being withdrawn by the aspirator. The quantity removed was not large, the colour about that of deep-tinted beer, not very clear. Resonance did not return over the lung, and the heart only slowly came back to its place. Tubular breathing

persisted, but there was not, as in the companion case, exaggerated vocal resonance, this, on the contrary, remained absent. The high evening temperature and night-sweats also continued, and as the patient recovered, which he did very slowly, the physical signs indicated the existence all over the lung of a thick layer of gelatinous exudation gradually undergoing organisation into dense adhesions

(To be concluded.)

OCCASIONAL RECORDS IN THE SCIENCE AND PRACTICE OF SURGERY.

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FOREIGN BODIES IN THE AIR-PASSAGES.

FEW accidents in life are so surrounded by danger and distress as those which attend the presence of foreign bodies in the air-passages. Whether we regard the uncertainty of diagnosis or the difficulty of treatment, it must be confessed that every recurring case can only be judged by the particular incidents connected with it; these, and these alone, must be studied ere the lines for operative interference can be laid down. The patience of the surgeon not infrequently, no less than his ingenuity, may realise a success that is not to be foretold by any instrumental aids, however complete and attractive their construction may appear.

CASE 1. *Portion of a Metal Buckle impacted in the Larynx; Misleading Symptoms; Death twelve months after the Accident; Dissection.*—E. M. T——, a girl aged seven years, was sent to me by Mr. Griffiths of Bilston, on August 7th, 1866, on account, as it was believed, of a portion of an iron buckle having passed and become fixed in her windpipe. I had submitted to me the following history:—On the evening of Sept. 1st, 1865, whilst playing and having in her possession a bit of buckle, which no doubt she held in her mouth, she was suddenly seized with choking and difficulty in breathing. Dr. Griffiths saw her in half an hour. There was then great difficulty in breathing but none in swallowing; change of voice to hoarseness; face anxious and very much flushed; no pain on pressure. After a few days of treatment the most distressing symptoms began to abate, and she took food as usual and played about. Time passed on and the child showed few symptoms of altered health, the few amounting to a persistent and very gradual thinning and an occasional hoarseness. So convinced were the parents, however, that the buckle was in the child's throat, that she was taken to a neighbouring hospital for examination, the result being the giving counsel that there were not sufficient grounds to justify interference.

FIG. 1.

Larynx laid open in middle line anteriorly, together with upper rings of trachea. The portion of buckle is seen lying as described.

Present condition.—General aspect that of a child with tubercular wasting, otherwise bright and cheerful. Respiratory murmur everywhere unchanged. Voice as usual, but altering to slight hoarseness on change of temperature. There was no tenderness about the larynx and absolutely no guide to any confident opinion, save the belief of the parents in the history of the events, now of seven months' duration. This belief seemed to them so convincing that they requested me to undertake an operation, and for this purpose the child was admitted under my care in the hospital on the 14th. On the following day a consultation of the medical as well as the surgical staff was held. The laryngoscope having been previously brought into requisition, and giving no sign to help, the result being a record that an operation was not warranted by the symptoms then present, which seemed to point to some tubercular affection rather than to any foreign body in the windpipe. After running about the hospital for a fortnight, the child was removed as well as when she came. This state unhappily was but brief, for three days after she left, happening on an overloaded stomach with soft buns at a tea meeting, violent vomiting suddenly rendered her breathless, and she died at once, exactly twelve months after the date of the accident. The post-mortem examination revealed the presence of a part of a common iron buckle, consisting of a transverse bar bearing two iron teeth impacted in the larynx, and lying in the following position. The bar is vertical and in contact with the middle line of the posterior wall of the larynx, extending from the upper border of the cricoid cartilage to the lower border of the third ring of the trachea. From the front of the bar the two teeth project horizontally, their anterior extremities falling almost into the angle formed by the junction of the two halves of the thyroid cartilage. The upper tooth is placed parallel to the true vocal cord on the left side, and about a line below it. The lower tooth is caught against the middle of the front of the cricoid cartilage, and this evidently constituted the principal obstacle to the foreign body descending further into the air-passages. The measurements of the buckle are: transverse bar, twelve lines; teeth, barely five lines; average thickness of metal, two lines.

The condition of the parts immediately adjacent to where this body so strangely lay hidden and without movement for a year were unchanged.

CASE 2. *Laryngotomy for Syphilitic Affection; Safe Retention of Silver Tube for Three Years; Erosion penetrating Blade of one side and Detachment into Bronchus; Unavailing Operative Measures for Removal; Expulsion during a Fit of Coughing, after a lapse of nearly Twelve Months; Recovery.*—M. L——, aged thirty-eight, for years under treatment for constitutional syphilis, at length was unfortunate enough to concentrate all the energy of the malady in the larynx. The effects of this rapidly became manifest in the production of stridulous voice, and in the occurrence of paroxysms of difficult breathing, that threatened to end fatally, and in the wasting of the frame to that of a mere skeleton. In a paroxysm, May 28th, 1879, more alarming than usual, I performed laryngotomy, inserting a full-sized silver cannula within the pair of expanding blades as usual. Health and strength gradually improved, the tube being taken out and repaired at intervals up to May, 1882. After this, to use the patient's words, "through his neglect or forgetfulness, no further examination took place," when on the morning of June 12th, after a violent fit of coughing, it was discovered that the right blade was missing, and had, as a matter of fact, dropped down into the bronchus. The patient was very little disturbed by this event, and came to me for counsel the same day. On examination I failed to find the slightest evidence of the situation of the blade, there being no alteration in the character of the breathing in any part of the chest. So he went about his business (that of a timber merchant) as usual, being troubled at times with cough on lying down, and he also complained of difficulty in breathing when on his left side. Ten days after the mishap, having himself devised a capital frame on which he was to be fastened, we raised him head downwards, and, prepared for all contingencies, shook and beat the chest wall, but to no purpose. Two such other attempts as these were made at intervals of about three weeks, but with no better success.—August 30th: Careful examination made by introduction through laryngeal opening of a long silver probe. This proceeding did not aid our search, for though both trachea and right and left bronchus were explored with remarkable toleration, the body was not felt.—Sept. 1st: Under chloroform I obtained an additional inch and a half of room by cutting through the cricoid cartilage and upper tracheal rings. The use of the probe was much facilitated by these measures, but failed to detect anything. Besides the use of the probe, the so-called "crocodile" forceps were introduced, to our judgment passing, as we desired, into either bronchus, the mouth of the instrument acting freely, but, after renewed attempts, failing to lay hold of the lost blade. The additional opening was prevented healing for a few days, and on Sept. 8th the last attempt was made by the same measures being repeated, this time, in my absence, by Mr. Jolly and Mr. Bennett May, who had given me the advantage of their counsel and assistance on the previous occasions which I have described. All their efforts, however, ended fruitlessly, and it was determined, by all concerned, to forego any further attempts. During the time that these proceedings were being carried out, it was marvellous to note how trifling was the disturbance that resulted to the patient's health. Some

additional cough and an increase in expectoration were alone present; and on Sept. 30th he went to Blackpool for change of air. Here he remained a month, and then returned to his daily occupation. During the next six months two attacks of feverishness and loss of appetite were noted, finishing by increased cough, but subsiding after a few days completely.—May 11th: In the early morning, whilst in bed, a severe attack of coughing occurred. He got up and proceeded to take the inner tube out to clean; and when dressing, and before replacing it, a still more severe paroxysm of coughing came on. Being alarmed lest a second blade had dropped off, he cut the tapes of the shield, taking it out to find its blades intact; but, to his intense relief, with the long-lost one caught firmly between them, their approximating points having served as forceps, well holding it even after being free from the laryngeal opening, as some tenacious mucus served to fasten their attachment. The expiratory effort had been strong enough to carry it close up to the shield—a position that, whilst happily securing its detention, led to the patient's promptness to sever the tapes and withdraw everything ere—to use his own words—"my breath was quite gone." The blade, as may be seen by the engraving, was thickly coated by black sulphide, but was otherwise unchanged. For the patient at this time of writing—five years from the laryngotomy and one year from the expulsion of the blade,—it can be recorded that he is in excellent health, keeping a careful watch on the integrity of his tube. Further, it is worth mentioning that in these five years there has been no fresh outbreak in his disease—an immunity not a little remarkable considering its ravages with very short intervals—a few months only—to the date of the operation; but an immunity, I confess, I am unable to explain.

FIG. 2.

A B

A. Detached blade, coated with black sulphide. B. Shield of tracheal tube, retaining one blade only—actual size.

I have very few observations to offer on the child's case of the fatal buckle. I have often since asked myself, Ought I not to have had the courage of my opinion? I think so, and I shall always regret that I was not fortunate enough to have acted on my earliest impression. The disinterested and exhaustive judgment of the staffs of two hospitals it is true, as a matter of fact, justifies the verdict that no one was to blame, but at the same time it is evident by what extreme difficulty such cases are encompassed. For the rest, the age of the child precluded much hope of revelation from the laryngoscope, and it revealed nothing, whilst the exact central position of the foreign body interfering in no perceptible degree with the passage of air to the lungs suggested a wasting from constitutional conditions as a not untenable position. Cases in which accidents have occurred with tracheotomy tubes, metallic or otherwise, may be referred to the advantage in connexion with the perusal of the circumstances of the one I now record. In the Medico-Chirurgical Transactions for 1877, p. 85, Mr. Hulke narrates an instance in which the outer tube of a Durham's instrument slipped through the collar and shield and lodged in the right bronchus, being successfully removed on the fourth day by means of a long piece of German silver wire bent with a blunt hook. At p. 93 of the same volume Mr. Howse mentions a patient in whom a flexible indiarubber tube fell into the right bronchus, its position there being clearly made out by forceps introduced through an enlarged tracheal opening, whence it was removed within a few hours. Mention is also made at p. 99, of a case under the care of Mr. Lucas, where the outer silver tube eroded after fifteen years' wear, and dropped into the left bronchus, whence it was removed after seven weeks of lodgment by forceps, the tracheal opening being enlarged.[1] The experience obtained from a case such as the one I now place before the profession points in a very clear degree to the adoption of certain rules for the guidance of our surgical treatment, and enables us to speak with some degree of confidence of the probable result of such an accident where the treatment fails to effect the removal of the foreign body.

Operative measures should be delayed as short a time as practicable, and should commence by a free extension of the existing openings into the trachea or larynx. Very long slender forceps admit of the most satisfactory movement; the crocodile forceps are too thick and too clumsy. If the body admit of being caught, as by hooking on something to it, there would seem to be nothing better than the German silver wire so successfully used in Mr. Hulke's case. It must never be forgotten, however, that in its traction it must be soft enough, if need be, to have its bent part straightened, or it might fasten itself when introduced far down, and lead to disaster. As to the frequency with which efforts at removal should be renewed, the condition of the patient must be the only guide. Nothing is better established than the fact of the accommodation of the air-passages, as time goes on, to the undisturbing lodgment of the most strange-shaped bodies. Moreover, this tolerance of their intrusion, whether by the bodies themselves or by the various forms of tracheal tubes, would appear to explain the very moderate amount of either local or general mischief that attends the often prolonged efforts made for their deliverance. Therefore, notwithstanding repeated failure in these, if the nutrition and reasonable comfort of the patient be assured, leave well alone. The time comes when the collection of mucus around a foreign body, like a piece of silver tube, leads to its displacement, for it is certain such substances cannot become encysted. Once a movement is set agoing, by natural processes of irritation from within, tending to eject the body, it is pretty certain before very long to be rushed up and out in safety, or it can be seized and extracted with comparative facility. Additional difficulty is thrown on a case where the substance is so slender, as in the instance of this one blade of the bivalve. There was nothing to show into which bronchus it had passed, and it was so thin that an appreciable grasp by forceps was hardly to be looked for.

Birmingham.

AN INQUIRY INTO THE

EFFECTS OF THE PROLONGED ADMINISTRATION OF THE BROMIDES IN EPILEPSY.

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(*Concluded from page 884.*)

IN the construction of the details of the tables in the previous part of this article care has been taken as far as possible to distinguish between the effects of the remedy and the symptoms associated with the disease, although this has not been always easy to accomplish. It has, however, been approximately arrived at by a careful study of the patient's health before treatment, as compared with his subsequent state, and those symptoms only were considered toxic which were superadded to pre-existing abnormal conditions. A general analysis of the facts thus collected show that in the majority of cases the physical and mental powers do not appear to be injuriously affected by the prolonged use of the bromides. It is not asserted that all the individuals placed under this section were necessarily sound in mind and body. In many instances the functions of these were impaired, but there was no evidence to indicate that this was the result of

[1] See also British Medical Journal, July 8th, 1876, p. 45, Mr. Davy's case, and THE LANCET, Jan. 20th, 1872, p. 81, Dr. Ogle and Mr. Henry Lee.

the medicine taken; on the contrary, there was every reason to believe that the symptoms thus displayed were a part of the original disease, and had existed prior to treatment. In a very small percentage of cases were both physical and mental powers unfavourably modified as a direct consequence of the use of the bromides, and even in these there is no absolute certainty that the drugs were entirely responsible for the symptoms, seeing that these might be attributed to the epileptic condition as well as to the toxic effects of the remedy. They are considered under this category as the abnormal phenomena appeared to be augmented after treatment and improved on its temporary cessation. They mainly consisted, on the one hand, of loss of memory, dulness of apprehension, apathy, somnolence, depression of spirits, and metal debility; and on the other, of bodily languor, muscular fatigue, and general physical weakness. In no case did any of these symptoms attain an excessive or prominent position. The same conditions apply when the physical or mental powers were impaired independently of one another. Under the heading of general symptoms of neurasthenia is included a series of indefinite subjective neurotic symptoms, without intellectual or bodily deficiencies, in which the patient complained of headache, neuralgic pains, tremors, of being easily startled and frightened, with that general instability of the nervous system to which the term neurasthenia has been given. This condition is extremely common in the epileptic, and is frequently relieved by treatment. At other times it remains persistent in spite of all medicaments, and the numbers in the tables indicate those cases conspicuous by their continuance under the use of the bromides. Those attacked by the follicular rash are seen at first to be about 16 per cent., but gradually diminishing in number as the treatment becomes chronic, and finally disappearing altogether.

In addition to the points referred to in the tables, other questions have been investigated, although on a smaller scale. For example, in persons who have been under the influence of the bromides for many years, the skin and tendon reflex action remain intact, and I have never seen a case in which the knee-jerk or plantar phenomena were absent. In only one case was the general sensibility of the skin perceptibly diminished. With regard to the effects on the sexual powers, I have not sufficient data upon which to found positive rules. This statement, however, may be made, that the prolonged use of even large doses of these drugs does not of necessity abolish or even sensibly impair this function, although, no doubt, it usually does so. On examining the respiration and pulse I have never been able to detect any characteristic abnormality.

I might record many cases in detail to prove the seemingly innocuous nature of even large and long-continued doses of the bromides in epilepsy. I shall, however, as an illustration, limit myself to a few notes on the four cases which compose Table VI., all of whom were continuously under the influence of the drugs for a period of not less than six years.

CASE 1.—Louisa C——, aged twenty-nine, has suffered from epileptic attacks for fourteen years. Prior to treatment she had three or four every week of a severe character, consisting of loss of consciousness, general convulsions, biting of the tongue, &c. She has always been a delicate person, with a tendency to great nervousness, but otherwise intelligent, and in fair general health. She has taken one and a half drachms of bromide of potassium daily regularly for the last six years, and states that if she attempts to discontinue the medicine all her symptoms are aggravated. At present the patient is a robust, healthy-looking woman, of fair intelligence and good spirits. Her memory is deficient. Her physical powers are vigorous, and she earns her living as a bookbinder. She has an attack about once a month, and with the exception of this and occasional headaches and nervousness, she professes and seems to be in excellent general health. Sensibility, the knee-jerk, and plantar phenomena are normal. The fauces are insensitive, and their reflex is abolished. Pulse 60, normal. The circulation, respiration, and other functions are healthy. No traces of bromism.

CASE 2.—Charles P——, aged thirty-five, has suffered from epileptic attacks of a severe convulsive character for eighteen years, having had one about once a month. Prior to treatment, although his memory was defective, his intelligence and general health were good. For the last six years he has regularly taken the bromides of potassium and ammonium (one drachm and a half) daily. At present he still continues to have an attack about once a month. His mental and physical condition is the same as before. He appears perfectly intelligent. His strength is robust, so that he does his ordinary work as a pianoforte maker. Pulse 74, of good strength. All the reflexes are normal, except that of the fauces, which is abolished. Sensibility of the skin to touch slightly diminished. The sexual functions are normal. No symptoms of bromism.

CASE 3.—Matilda W——, aged thirty-one, has suffered from epilepsia gravior and mitior for twenty-two years, having of the former about one seizure in three months, and of the latter about ten or twelve a day. She has always been a delicate woman suffering from headaches, general irritability, and nervousness. She is, however, perfectly intelligent. For six years past she has taken regularly the bromides of potassium and ammonium, one drachm of each daily. At present she has not had an attack of epilepsy major for a year, and of epilepsy mitior only about one a week. Although anæmic, her general health is good, and she is able to do a full day's work as a washerwoman. Intellectually she is quite sound, but has a treacherous memory, and is very nervous. Sensibility, reflex acts, &c., are as in the other cases.

CASE 4.—Lucy D——, aged twenty-two, has suffered from epilepsy major for eight years. Formerly had about one attack a week. Has always been a delicate girl, but her general health and mental condition have been normal. For the last six years she has regularly taken one drachm and a half of the bromides daily (potassium and ammonium in equal parts). She has had only three attacks during the past year. Her general health is excellent. She is robust and active, and takes her full share in domestic work. She is well educated, intelligent, with a good memory and spirits, and has no tendency to depression or somnolence. The sensibility reflex acts and other functions are as in the other cases.

In these four cases it has been ascertained that the patients were constantly under the influence of large doses of the bromides for a period of not less than six years, and practically without intermission. During this period not only were the frequency and severity of the convulsive attacks beneficially modified, but there was no evidence to show that the physical or mental condition had been in any way impaired. It is further to be observed that these, as well as many others of those constituting the later tables, are examples of unusually long-standing and severe forms of epilepsy, as evidenced by the fact of their chronic and intractable nature even under treatment. Notwithstanding the incompleteness of their recovery, these individuals have voluntarily, and often at great inconvenience and expense, persevered in the use of the remedy, which is a fair indication they derived some substantial benefit from it. The examples before us, one and all, declared they have found by experience that when they have attempted even for brief periods to discontinue the medicine their symptoms have all become aggravated. As a result the attacks increase in severity and number, the headaches return, the nervousness augments, and they are unable to perform either mental or bodily exertion. These sufferings, it is maintained, are greatly modified by the bromides, as under their influence epileptics may perform their daily work, when without them they are comparatively useless. It would be easy to multiply individual cases supporting the same general principles. One more instance only need be particularised—namely, that of a man aged thirty who has suffered from epilepsy from infancy, and who for the last five years has taken *four and a half drachms* of the bromides daily—i.e., during that time he has consumed upwards of eighty pounds of the drug. Although a delicate person and intellectually weak, his friends state that during those years he has been more healthy and robust in mind and body than at any other period of his life. And these statements were confirmed by other testimony.

While attempting to estimate the therapeutic value of the bromides from a statistical aspect, one likely source of fallacy must not be overlooked. Most patients, and especially those attending hospitals, are difficult to keep under observation for long periods, more particularly if the progress of the case is unsatisfactory. In this way we may lose sight of those who do not benefit by treatment or who are injured by it. Although it is difficult to estimate these with accuracy, a certain rebatement must always be made on this count in computing results. At the same time we have in the present inquiry positive evidence in a considerable number of cases of the innocuous and beneficial nature of the drug, against the negative possibility only of its disadvantages. Of the 141 cases under notice, I only know of three who have

died, and all of them of phthisis pulmonalis. The relations existing between the mortality and cause of death on the one hand, and the disease and treatment on the other, the paucity of the data do not permit us to determine. A further study of the tables would also seem to show that while the beneficial action of the bromides remains permanent, the deleterious effects diminish the longer the drug has been taken. This is doubtless due, as in the case of most poisons, to the system becoming habituated to its use. It has often been observed that the most marked effects of bromism have appeared at the beginning of treatment, and that the eruption, the physical and mental depression, &c., subsequently disappeared, although the medicine was persevered in. Those who have been under its influence for some years rarely present any symptoms directly attributable to the toxic effects of the bromides; and if abnormal conditions do exist, these are the sequelæ of the malady, and not the results of treatment, as shown by the fact that when the last is suspended, the original sufferings are augmented.

It may be suggested that a prolonged use of the bromides becomes, as in the case of opium, a habit. There is, however, a marked distinction between the two. Opium-smoking is a vice not only deleterious in itself, but one indulged in merely to satisfy a morbid craving. The bromides, on the other hand, are less hurtful in their effects, and are taken to avert the symptoms of a distressing and terrible malady. Assuming, then, that their consumption becomes a necessity, if it can be shown that the results are not serious, while the evils they avert are important, the habit acquired may be looked upon as a justifiable one.

A general review of all these circumstances seems to render it probable that the epileptic constitution is more tolerant of the toxic effects of the bromides than the healthy system. The most severe effects of bromism occur in those who are not the victims of this malady, in whom, as seen by the foregoing facts, they are not common. Theoretically this may be plausibly explained by the reasonable assumption that, as in epilepsy the entire nervous apparatus is in a state of reflex hyper-excitability, the sedative and poisonous effects of the bromides do not produce the depressing or toxic actions they would do in a more stable organisation. Whatever the reason may be, the fact is that the symptoms of bromism are not so severe in the epileptic as they are in otherwise healthy subjects.

Finally, the important question arises, Does a prolonged use of the bromides tend towards the eradication of the disease itself and the ultimate cure of the epileptic state? On this point I have no personal statistical evidence to offer, nor am I aware of the existence of any sufficiently scientific series of data to settle the question. Without there being actual demonstration of the fact, there is every reason to believe that such a supposition is possible. Clinical observation has determined that the larger the number of convulsive seizures the greater is the tendency to the production of others, and the more readily are they caused. Such is the abnormal reflex hyper-excitability of the nervous system of the epileptic that the irritative effects of one attack seem directly to predispose to the occurrence of a second; so that the larger the number of explosions of nerve instability which actually take place, the more there are likely to follow. Could such seizures be kept in check, this cause of the production of convulsions at least would be diminished, the liability for them to break out as a result of trifling external stimuli would be lessened, and the long-continued absence of this source of irritation might by the repose and favourable circumstances thus obtained, encourage a healthy transformation of tissue. Now, it has already been pointed out that in 12·1 per cent. of epileptics the attacks were completely arrested during the entire time the drugs were being administered, and that in a much larger percentage they were greatly modified in number and severity. It has been further shown that the remedies themselves, even when in use for long periods, are in themselves practically innocuous, while at the same time they continue to maintain their beneficial effects on the attacks. It therefore follows that a sufficiently prolonged treatment might in a certain number of cases be succeeded by permanent curative results. The chief impediment to arriving at trustworthy conclusions on this subject has been the length of time necessary to judge of lasting benefits, and the difficulty of keeping patients sufficiently long under observation. Another has been the objection raised to the method of treatment on the grounds of a visionary suspicion that the toxic effects of the drug were of a dangerous nature, and their results more distressing than the diseases for which they were given. So far as my experience has extended I believe this fear has not been warranted by facts.

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EXAMPLES OF

SOME SURGICAL DISEASES AND ACCIDENTS OF RARE OCCURRENCE.

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(*Concluded from page 886.*)

CASE 8. *Talipes Equino-varus acquired in an unusual way.*—Cases of acquired club-foot occur, for the most part, as sequels of infantile paralysis. But it is especially interesting to know that talipes may also be acquired when the foot, from any cause, is voluntarily held, during walking, in a distorted position, and the habit maintained for a length of time. This clinical fact is one, moreover, which is very suggestive as regards both the pathology and treatment of club-foot. Scarpa refers to this mode of the deformity being acquired, relates an instance of its occurrence in his own practice, and cites the experience of others in regard to it. He says: "Bruckner relates the history of a man, sixty-four years of age, who had had variolous pustules on the sole of his right foot, which in course of time prevented him walking in any other way than on the outer edge of his foot. This mode of walking having become habitual to him, his right foot at last became distorted inwards. The same author speaks of a girl, seven years of age, who had been affected for a long time with a superficial ulcer on the internal margin of the foot. To prevent her suffering pain she walked for some time on the outer edge of the foot, and at last, as in the man above-mentioned, the foot became twisted inwards and the leg very much emaciated. ..... On Jan. 1st, 1804, Mario Savio, of San Leonardo, a girl ten years of age, applied for advice at this clinical school of surgery, having her right foot very much deformed and turned inwards. Her mother mentioned that towards the end of May of the preceding year, the girl walking with bare feet, a thorn ran into the sole of the right foot, near to the inner edge of the foot. Some time after this accident the thorn was removed; but, nevertheless, the foot around the place of the injury inflamed, suppurated, and a slight superficial ulcer formed, which was more than a fortnight in healing. During this time, the poor girl, being obliged to stand on her feet, walked at first on the point of the right foot; then, finding it less inconvenient to walk on the outer margin of the foot, continued to do so, and acquired such a habit that, seven months after the extraction of the thorn, her foot was found very much deformed and turned inwards, without having the power of turning it right at pleasure. On Jan. 3rd the first apparatus was applied to this girl, by means of which....., in the course of three weeks, the point of the foot turned inwards was by degrees brought back to its natural direction with the corresponding tibia. ..... She continued the use of the second apparatus for two months, in order to obtain a permanent cure, which was completely effected."[1] The following account of my case was entered in the ward journal on the admission of the patient, who was a little boy thirteen years old, into the Western Infirmary, on Oct. 25th, 1881:—"Two years ago, in summer, he was running about barefooted, when his heel was injured by a nail. The wound seems to have inflamed, suppurated, and led to a small, deeply excavated ulcer, with hard, corny edges, which the boy tells us his father used to pare with a knife. Pressure on the sore, either by the hand or by attempting to bear the weight of the body on the flat foot, caused very great pain. He was allowed to run about without restraint, and in consequence took to walking about on the outer border of the foot with the heel raised. A callosity in the skin, under which there is probably a bursa, exists over the base of the fifth metatarsal bone, indicating the point of greatest pressure in the usual mode of walking. He still walks in this way, although the sore only lasted for six months. He is quite unable to put the foot flat to the ground, and the case has all the appearance of that of an ordinary, although not very exaggerated, talipes varus.

[1] Memoir on the Club-foot of Children, translated by Wishart, p. 45.

There are the usual inversion and rotation of the foot, with raising of the heel, and shortening and flexion of the sole. On Nov. 9th tenotomy was performed under chloroform, and suitable apparatus was afterwards applied to the foot." The ultimate result was an excellent one, the patient being able once more to apply the sole of the foot flat to the ground. The interest which attaches to such cases is much increased when we are informed, as, indeed, we might almost expect, that the converse occurrence has been observed—namely, that well-marked congenital talipes varus in a child may be entirely cured by the patient being compelled, while walking, to avoid putting the outer border of the foot to the ground. I quote a short notice of such an occurrence from the *London Medical Record*, vol. vi., 1878. "Mr. John Macdonald[2] relates a very instructive and suggestive case of talipes varus, cured without operation, in a lad aged eleven years. When between four and five years old, he trod upon a nail and injured his left foot, just where the pressure was greatest when he stood. Being active and restless he moved about on the tips of the toes of the injured foot; and by the time the wound was healed, the foot was so much improved that he never afterwards walked on the outside of it, as formerly. In less than a year the deformity had nearly disappeared. Being now six years old, he was induced to plant the sole of his right foot on the ground, and, gradually taking a pride in showing how well he could manage to walk, at the present time both feet are quite free from the deformity, except that the right tendo Achillis is perceptibly shorter than normal."

CASE 9. *Wound of the Superior Longitudinal Sinus.*—On the 18th of October, 1882, I resolved to apply the trephine in the case of a young man who, seven years ago, sustained a compound, depressed and comminuted fracture of the upper and central part of the frontal bone. At the time of the accident he was taken to the Paisley Infirmary, where the trephine was applied, and a loose piece of bone, about three inches in length, was removed. After a severe attack of erysipelas he made a good recovery, and remained well for about three years. About this time he began to suffer from mental confusion and giddiness, and ultimately from distinct epileptic seizures. These had gradually increased in frequency during the last four years, until latterly they sometimes recurred several times in one day. His memory and mental powers generally had also been gradually deteriorating. Careful examination of the region of the scar did not detect any aperture in the skull, which, however, was considerably depressed over the central and upper portion of the frontal bone. I was prepared to be specially careful in my application of the trephine at this point, owing to the proximity of the superior longitudinal sinus, but was not prepared for its being accidentally wounded by me, in the manner in which that actually occurred. I made a crucial incision through the scalp, carrying the knife firmly against the skull throughout its entire length. From one point a dark and profuse stream of blood began to pour out, and continued to do so in such quantity as to cause me great surprise. Having hastily raised the flap of skin covering this point, I found that the hæmorrhage was really proceeding from the superior longitudinal sinus, there being a narrow aperture in the skull over its situation, in the form of a short slit or chink, through which the blade of my knife had sunk and wounded the great vein. A very slight pressure with a piece of lint controlled the bleeding, and allowed me to proceed to remove with the trephine a disc of bone over the most depressed spot. The pressure of the dressings subsequently applied (for the aperture by the trephine was made so as to expose the spot from which the bleeding proceeded) prevented any renewal of it, so that, although at the time profuse and alarming, it occasioned no further trouble. The fact illustrated by this case, that a comparatively slight degree of pressure will permanently control even alarming hæmorrhage from the sinuses of the dura mater, just as it does that from other large veins, is one which appears to be in accordance with the invariable experience of those who have met with cases of wound of this vessel. Yet the dread of fatal and uncontrollable hæmorrhage seems to be the common attitude of mind still with which many contemplate the possibility of its occurrence. An imaginary fear of this sort may, therefore, at times deter from a necessary operation with the trephine, and it is well that it should be dissipated. The only other case of wound of the superior longitudinal sinus of which I have any personal knowledge is one which occurred in Professor Lister's hands in the Edinburgh Infirmary. The hæmorrhage was readily controlled and never recurred. In Percival Pott's well-known essay on "Injuries of the Head from External Violence," two cases are narrated, which are such good examples of the same fact that I quote them here at length.

CASE 10.—"A boy, about eight years old, the son of a Jew merchant in the city, received a blow on his head with a stick from his tutor. The stroke made him giddy for a few minutes, but as no blood was shed, and the pain soon ceased, he concealed it until it was discovered by his barber that his head was swollen in that part. In the middle of the top of his head was a tumour, about the size of a common walnut; it was indolent, had a dull kind of pulsation, and palpably contained a fluid. Mr. Serjeant Amyand and Mr. Shipton were joined with me. In their presence I divided the tumour with a knife, and let out a quantity of fluid venous blood. When as much had been discharged as the tumour might be supposed to have contained, we were surprised to find the blood still continue to flow, plainly not from the wounded scalp, but from the bottom of the cavity. Upon examination it was found that the sagittal suture was broken, that a portion of the fracture was forced into the sinus, and that the blood issued by the sides of this fragment. Extraction of this fragment was attempted, but to no purpose. By the direction of the consultants I made a small perforation on one side of the suture, but when that was done the point of the elevator could not be so introduced as to get the broken piece out. The trephine was then applied on the other side of the suture to the same effect, or, rather, no effect. The fragment was only capable of being extracted as it had gone in. At last, after much deliberation and conversation about the hazard of wounding a sinus (which was, indeed, already wounded by the broken bone), it was agreed to set a trephine on the suture in such manner that the whole surface should be comprehended within its circle. This was done, but when the elevator was applied, the piece sawed came out in fragments, and left the one portion which had pierced the sinus still sticking in it. We were then necessitated to lay hold of it and extract it with a pair of forceps. A flux of blood followed, but by the application of a small dossil of dry lint, held on for a few minutes, it ceased, and never recurred. The patient is alive at the time of my writing this."

CASE 11. "A girl, about sixteen, was knocked down by her mother with an iron poker of considerable weight; the latter immediately ran away, and the former was brought senseless to the hospital. She had a large wound on the top of the head, with a considerable fracture of the sagittal suture. The broken pieces were so large and so loose as to be easily removable without any perforation. When they were taken away the longitudinal sinus was left bare, at least two inches in length; but no hæmorrhage followed the removal of the fragments. For three days she was bled twice a day from one part or other of her, and stools were procured in such manner as was possible; but to no purpose, she still remained perfectly and absolutely senseless. On the fifth day, finding her still in the same state, and verily believing that nothing in art could at all serve her, I made an opening with a lancet into the longitudinal sinus and suffered the blood to run off, until her countenance, which was much flushed, became pale, and her pulse, which till now had been full and strong, though labouring, faltered considerably—in short, till she showed as much as a senseless person could a deliquium from inanition. I then put a bit of lint on the orifice, and ordered the nurse to keep her finger lightly on it until I had visited the rest of the house. When I returned the part showed no disposition to bleed again, nor did it ever after. That afternoon she opened her eyes and moved her arms, and the next morning was sensible enough to ask for drink. She retained her senses for several days; but, a fever coming on, she became delirious and convulsed, and died so on the seventeenth day from that of her admission into the hospital. Upon examination after death, a considerable abscess was found on the surface of the brain, on one side of the falciform process of the dura mater."

In the "Operations in Surgery," by M. le Dran, translated by Mr. Gataker, and with remarks by Mr. Cheselden, the latter surgeon warns us that "the sagittal suture sometimes extends from the nose to the back part of the head, under which lies the longitudinal sinus and over which the trephine should never be applied." Nevertheless, the only case of wound of that vessel he appears to have known is

[2] Vide THE LANCET of April 20th, 1878, p. 566, for a full report of the case.

one which was recovered from. He cites it a few lines further on as follows:—"I have heard of an operation upon the middle of the os frontis by an ignorant surgeon who wounded the longitudinal sinus or vessels that empty into it, and not knowing what he had done, concluded at first that this blood had been extravasated before, but the quantity soon convinced him of his mistake, upon which he stopped the bleeding with dry lint, and had the good luck to save his patient."

I find, in addition to these cases, the details of other two cases narrated by Lassus, in a memoir which forms one of a selection of memoirs of the French Academy of Surgery translated by the Sydenham Society (1848), "On Wounds of the Superior Longitudinal Sinus." One of these cases is extracted from a work entitled "Observations in Surgery," by Warner, "a celebrated surgeon in London." It is that of a boy of thirteen, "who was struck by a pointed piece of iron on the upper and middle part of the head. The blow fell so directly on the sagittal suture that a portion of each parietal was driven into the longitudinal sinus. ..... The hæmorrhage was at first increased by extracting them (i.e., the fragments), but the application of a little dry lint soon stopped it." He made a good recovery. The other case is one narrated by M. Gagnière. "On the 24th May, 1770, M. Gagnière was sent for three leagues from the town, to attend a lad of fourteen, who had received a blow on the top of his head with a dung-fork. The blow had been carelessly given by one of his companions. A pretty large quantity of blood flowed at first from the wound, which was stopped, however, by the applications made at the time. M. Gagnière found an opening in the scalp as big as a six-sou piece. On introducing a probe he found that it penetrated to the skull; a crucial incision enabled him to remove some splinters of the frontal bone, and he then perceived a clot of blood which had formed in the opening of the superior longitudinal sinus, which had been made by the hook. The patient was dressed in the usual mode after the use of the trepan, the opening made by the removal of the splinters serving instead of a trepan hole. The pledget was moistened with balsam of Fioraventi; no severe symptoms followed, and the wound was quite healed by the end of three weeks."

Glasgow.

SOME EVIDENCE WITH REGARD TO SALICYLATE OF SODA.

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BY the courtesy of Dr. Beale I am allowed to publish the notes of two interesting cases which have recently been treated in his wards. They will, I trust, contribute something to our knowledge of the action of salicylate of soda. In the first case acute tonsillitis was developed after the patient had been taking the remedy during nine days for rheumatic fever; and in the second case rheumatic fever with cardiac complications appeared after the patient had been under its influence for the same period, the drug in this instance having been given for acute tonsillitis.

CASE 1.—David A——, aged nineteen, a clerk, who had never had rheumatic fever or rheumatism, and was not exposed to wet or cold, was admitted to the Sambrooke ward on April 21st, 1883. He had had pain in his joints for the previous week, but had kept at work up to admission; then he had pain in his shoulders, knees, and ankles, with some effusion into the left knee; temperature 101·6°; pulse 80, small and regular; cardiac area and sounds normal. He was given twenty grains of salicylate of soda every four hours. Three days afterwards he was free from all pain, the temperature was normal, and the salicylate was continued every six hours. On his sixth day in hospital, remaining free from all pain and fever, he was allowed to get up; and on the eighth day the dose of salicylate was decreased to twenty grains three times a day. On his tenth day in hospital (May 1st) the temperature rose to 102° and 103·2°. He had no return of rheumatic pains, but had considerable pain in his throat, tenderness below the right jaw, and dysphagia. On inspection the right tonsil was seen to be swollen and acutely congested. He was given a saline purge; but next morning the temperature remaining at 102°, and the symptoms unrelieved, the full dose of twenty grains of salicylate every four hours was resumed. That evening the temperature was 103·6°, but on the next day it fell to 100°, and on the following day to normal, when he was free from all dysphagia, sore-throat, or tenderness, and the right tonsil was seen to be only slightly passively enlarged. The patient left the hospital on the fourteenth day. He stated he was subject to sore-throats.

CASE 2.—Frederick N—, a pale, thin man, aged twenty-five, was admitted to the Sambrooke ward on March 2nd, 1883, complaining only of his throat, which had been sore for the previous fortnight. He had attended the out-patient department two days previously without relief. On admission his temperature was 101°; there was much tenderness below the angle of the right jaw; he was unable to open the mouth wide, and the tongue was protruded with difficulty; the voice was of the peculiar "tonsillitic" character, and there was extreme dysphagia; the left tonsil was seen to be passively enlarged, while the right and the neighbouring part of the palate were enlarged and acutely congested; the pulse was 64, full, soft, and regular; the cardiac area normal, and the heart's sounds normal, but accentuated. On being questioned, he confessed to some pain and slight tenderness of the large joints of both arms and legs, but not sufficient to prevent him from walking about. He had never had rheumatic fever, nor had he been subject to rheumatism. The case appearing to be one of so-called "rheumatic tonsillitis," he was given twenty grains of salicylate of soda every four hours. The following day the throat was greatly relieved, the right tonsil less injected, and the temperature 99·4°. On the third day there was no pain in the throat and no congestion; he swallowed with ease; all the rheumatic pains had disappeared, and the temperature was normal. The salicylate was continued every six hours. He felt so well that he was anxious to get up; but the temperature remaining at or slightly above 99°, he was kept in bed. The pulse fell as low as 56, and the urine continued to give the salicyl reaction. On his ninth day in hospital (March 11th) he developed pain and tenderness in all the joints of the arms, and to a less extent in the hips and knees. He complained of pain in the præcordial region, and auscultation revealed a pericardial bruit at the base. The temperature was 101°. The salicylate was at once ordered every four hours; but the temperature continued rising during the two following days until it reached 103·6°; the pains in the joints became so acute that he was unable to turn himself in bed; effusion took place into both wrists and knees; a distinct to-and-fro bruit was heard in the third left intercostal space, and a soft systolic murmur became audible at the apex. The pains were so severe that the administration of Dover's powder was required to give him ease and sleep. Then the symptoms gradually abated. On the seventeenth day the temperature had descended to normal, and on the nineteenth day (March 21st), there being no rheumatic pains and the temperature continuing normal, the dose of salicylate was reduced to every six hours, and on March 23rd to every eight hours. This was followed on March 26th by a return of pain in the joints and præcordium and a temperature of 102°. These symptoms again subsided under increased salicylate; and on April 20th, after being seven weeks in hospital, the patient was discharged free from all pain but with a slight systolic roughness in the third left intercostal space and a soft systolic murmur at the apex. Throughout the period of fever there was free, sour-smelling diaphoresis.

The connexion between tonsillitis and rheumatic fever, and the way in which the former preceded the latter, was pointed out in a paper on the "Association of Affections of the Throat with Acute Rheumatism," by Dr. J. R. Fowler, in THE LANCET of December 11th, 1880; and a note on March 11th, 1882, by Dr. J. W. Hunt, on the marked success of salicylate of soda in acute tonsillitis, for which he had found it almost a specific, drew confirmatory communications from Dr. Lennox Browne and Mr. Amand Routh. On June 17th, 1882, Mr. R. N. Hormazdji wrote to the same effect, and stated that "he had yet to find a case treated with salicylate followed by rheumatic fever." In the discussion at the Medical Society on the treatment of rheumatic fever[1] the evidence was unanimous on the rapid beneficial results to fever and pain by salicylate of soda. As regards its effect on the heart, Dr. Gilbart Smith's statistics showed an increase of heart complications compared with

[1] THE LANCET, December, 1881, and January, 1882.

other plans of treatment. Dr. Broadbent and Dr. Fagge did not believe that heart complication cases were increased by the salicylate. Dr. Broadbent said it was exceedingly rare to see heart disease springing up during the administration of this remedy, and Dr. Fagge could hardly find one case in which there was reason to believe that pericarditis set in at a time when the action of the remedy was fully established. Sir William Gull and Dr. Sutton state that "if the patients pass the first few days of the rheumatic fever without the heart becoming involved, then they do not contract heart disease during the later period of the rheumatic attack."[2]

I quote these opinions since the evidence of the above cases, while giving support to some points, supplies deficiencies in others. They would seem to show a connexion between tonsillitis and rheumatic fever, and that salicylate of soda in large doses gives marked and speedy relief to certain cases of acute tonsillitis. Mr. Hormazdji will here find a case he was in search of—viz., one of tonsillitis not only treated with but still under salicylate of soda followed by rheumatic fever. Here, too, is a case such as Dr. Broadbent said was exceedingly rare, and Dr. Fagge could hardly find—viz., one of heart disease springing up during the administration of the salicylate. If we consider the nine days before Case 2 was attacked with acute pains, as "the first few days of the rheumatic fever," then its result is opposed to the statement of Sir W. Gull and Dr. Sutton. Both these cases raise the question, When is the action of the remedy fully established? In Case 1 twenty grains three times a day were not a preventive of acute tonsillitis. From Case 2 it would appear that the salicyl reaction in the urine cannot be taken as a criterion of the physiological dose having been reached. Here it was present after the patient had been taking the drug for nine days, and while the dose was still twenty grains every six hours. Yet this was not sufficient to prevent or in any apparent way modify the attack of rheumatic fever. In both cases good effects were only obtained by the full dose of twenty grains every four hours. It might seem presumptuous to found any opinion on the evidence of only two cases; but as the rare opportunity was afforded of carefully observing them for days before the supervention of the acute attack, I trust they may not be without value.

Gloucester-terrace, Kensington, W.

CASE OF

AGUE TREATED BY BATH MINERAL WATERS AND BATHS.

BY A. B. BRABAZON, M.D.,
PHYSICIAN TO THE BATH MINERAL WATER HOSPITAL.

IN THE LANCET of Oct. 27th, 1883, my colleague, Dr. J. K. Spender, gave an interesting account of a case of ague, apparently successfully treated with baths and mineral waters at the Bath Mineral Water Hospital. Since the publication of this case in your columns, I have had under my care in the same hospital a case which, if not regular ague, at least belongs to that class of which ague is the typical form—I mean the class comprehending all fevers of the intermittent character. I beg to submit the history of this case to the readers of THE LANCET, the notes of which have been carefully taken by the present resident medical officer, Mr. Merces. I regret that having a wholesome dread of the editorial scissors, I am obliged to abbreviate the carefully noted history of the case.

Wm. H——, aged thirty-three, a platelayer in the Underground Railway, near Chadwell, was admitted to the Bath Mineral Water Hospital on Dec. 28th, 1883, for ague. He had been a perfectly healthy man until he enlisted in an infantry regiment nine years ago. Immediately after joining the regiment he was ordered to the South Coast of Africa, where he was on active service for five or six months. In Cape Town he had an attack of acute rheumatism, which confined him to bed for nearly nine weeks. He attributed the attack to the low and marshy condition of the surrounding country. He perfectly recovered from this attack. After this illness he served for six months in South Africa, being in good health; amongst other places, at the Orange River, whence he was ordered to Cape Town, thence to Durban. The weather was very warm and changeable, and vegetable decomposition abundant in the districts through which he marched with his regiment. Thence he was ordered to the Mauritius, where, after the second week of his stay, he had an attack of fever extending only over seven or eight days. His medical attendant pronounced it to be remittent fever. The patient himself graphically describes the symptoms of such fever. His next service was in India, where he continued for three years. He suffered here occasionally from diarrhœa, but was otherwise in good health. He was then sent home and got his discharge. His home being in London, he got employment on the Underground Railway, where he had an attack of ague on Sept. 24th, 1883. He describes his condition at the time of the attack as follows:—A day or two previous to the attack he suffered from frontal headache, malaise, and feeling of cold water being poured down his back. He was suddenly seized with shivering so severe that his teeth shattered and his whole body shook; pain in his back and head. Bowels were confined, and he passed large quantities of pale urine. He continued in this stage for about half an hour. He then gradually got warm, and in less than half an hour felt comfortable, but very weak and languid. The skin then became very hot; he experienced great thirst; perspired freely about the head and neck, and then all over the body. After this he felt better, but still weak and inclined to sleep. These attacks recurred about every twenty-four hours, with sufficient precision to enable him to state when the next attack would come on. About a week after his first attack he applied as an out-patient at Guy's Hospital. He was treated with quinine, and told he had ague and enlargement of the spleen. He remained in attendance at Guy's Hospital for eight weeks. He was admitted as a patient into the Bath Mineral Water Hospital on Dec. 27th, 1883. His general condition on admission was that of a fairly nourished man, of sallow complexion. Heart and lungs healthy and sound. Abdomen rather contracted. Liver dulness normal; edge of spleen to be felt below the costal arch. Urine amber-coloured; sp. gr. 1028, acid, abounding in lithates; no albumen. The patient commenced taking baths on Dec. 28th, with the use of waters internally; he continued the use of them three times a week until his discharge on Jan. 21st, 1884. The recurrence of attacks of ague were as follows:—Dec. 30th, not so severe as previous attacks.—31st: Severe attack.—Jan. 1st, 1844: Attack, but milder, splenic enlargement continues.—3rd: Attack still less severe.—10th: Has had one attack since Jan. 3rd, very mild; splenic enlargement has disappeared; from this date to his discharge on Jan. 21st he had no attack.

I trust I may be pardoned for giving *in extenso* a rather prolix account of the history of the patient previous to admission. My reason for doing so is to place beyond doubt that this was a case of genuine ague or intermittent fever. I am aware that many so-called cases of intermittent fever are really not ague. The history of this case, with the climatic changes and tropical surroundings attended with everything locally favourable to the development of the effects of malarious influence, points to the identification of the disease; even when he took to civilian life and labour in the underground railway, these conditions to some extent continued, so I am impressed with the idea that this "underground" work would be likely to reproduce the intermittent symptoms. Then, again, we have the diagnosis of the physicians of Guy's Hospital of ague and splenic enlargement. According to the patient's account the ague appears to have been generally of the quotidian type; and it is rather an interesting fact that after commencing the mineral water baths, the first three attacks were quotidian in type, and the three following tertian, in accordance with the well-known rule of intermittents—viz., that improvement is marked by the postponement of the periods of attack.

I may be accused of drawing my inferences too much in the *post hoc ergo propter hoc* fashion, but I do not think a perusal of the case will afford sufficient grounds for that accusation. I have honestly laid down the premises, and I leave my readers to draw their own conclusions.

Bath.

[2] Medical and Chirurgical Transactions, vol. lii., p. 80.

THE salary of Dr. Sutton, medical officer of the Streatham district of the Wandsworth and Clapham Union, has been increased by £40 per annum

SEX AND TUMOUR FORMATION:

AN ANALYSIS OF 10,100 CASES.[1]

BY W. R. WILLIAMS, F.R.C.S. ENG.,
SURGICAL REGISTRAR TO THE MIDDLESEX HOSPITAL.

I AM not aware of the existence of any comprehensive statistics of tumours embracing a sufficiently large number of cases to be perfectly reliable. I undertook the present investigation, hoping by so much to make good this deficiency. I propose to limit my remarks to the subject of sex and tumour formation, reserving the subject of age and tumour formation for subsequent consideration. For this purpose I have made an analysis of all the primary tumours — 10,100 in number — under treatment at four large metropolitan hospitals during the following years: Middlesex Hospital (seventeen years, 1883), 67; St. Bartholomew's (ten years, 1882), 73; St. Thomas's (nine years, 1882), 74; University College (eleven years, 1881), 71. Thus:—

TABLE I.

Carcinoma.		Epithelioma.		Rodent ulcer.		Sarcoma.		Myxoma.		Keloid.		Fibroma.		Adenoma.		Lipoma.		Osteoma.		Enchondroma.		Papilloma.		Cystomata. Congenital.		Cystomata. Sebaceous.		Cystomata. Simple.		Cystomata. Ovarian.		Uterine fibroids.		All others.		Total.		Grand total.
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	—
587	3166	1289	418	50	46	439	388	20	18	10	9	65	132	30	266	109	258	76	88	28	27	47	57	26	25	131	117	51	35	—	530	—	604	347	484	3325	6775	10,100
16	84	76	24	52	48	53	47	53	47	53	47	33	67	10	90	30	70	47	53	51	49	45	55	51	49	53	47	37	63	—	—	—	—	42	58	33	67	100

Approximate percentage.

Appendix to Table I.

(*a*) In using the terms *carcinoma* and *epithelioma* I have followed the classification adopted by the registrars of the hospitals whose reports I have employed. But in this respect they are not perfectly unanimous. In the Middlesex and University College reports, for instance, all the uterine cancers are classed as carcinomas, but in the St. Thomas's and St. Bartholomew's reports they are divided between these and the epitheliomas, only a small number being included in the latter group, however. Minor divergencies of a similar nature are noticeable in the classing of some of the other local cancers.

(*b*) Eighty-six per cent. of the *adenomas* were of the female breast; of those situated elsewhere the majority were in the salivary glands, the male liability to these being more than double that of the female.

(*c*) Of the *enchondromas*, thirty-seven were connected with the bones, chiefly of hand and femur—twenty males and seventeen females. Eighteen were connected with the salivary glands, seventeen with the parotid, and one with the submaxillary—eight males and ten females.

TABLE II.

Showing Locality and Relative Frequency.

Cancer.	Total (47 years). Male.	Total (47 years). Female.	Grand total (both sexes).
Breast	13	1310	1323
Uterus	—	1160	1160
Tongue	384	64	448
Rectum	130	127	257
Skin of face, head, and neck, including rodent ulcers (*a*)	161	89	250
External genitals (*b*)	126	102	228
Lip	221	2	223
Stomach	127	80	207
Liver	80	75	155
Skin of trunk and limbs (*c*)	96	40	136
Œsophagus	93	23	116
Mouth	78	11	89
Glands	31	24	55
Intestines (*d*)	23	26	49
Bladder	26	10	36
Upper jaw	21	15	36
Peritoneum	13	18	31
Testis	24	—	24
Anus	14	7	21
Ovary	—	20	20
Kidney	13	7	20
Larynx	19	1	20
Bones (other than jaws)	7	7	14
Pelvis	1	9	10
Lung	7	3	10
Tonsil	6	3	9
Mediastinum	6	3	9
Pharynx	4	4	8
Pancreas	4	2	6
Prostate	5	—	5
Lower jaw	4	1	5
Perineum	1	2	3
Bile-duct	1	2	3
Gall-bladder	1	1	2
Pericardium	1	1	2
Parotid	2	—	2
Pleura	—	2	2
Dura mater	—	1	1
Lachrymal sac	—	1	1
Abdominal wall (not skin)	1	—	1
Symphysis pubis	—	1	1
Urethra	1	—	1
Thyroid	1	—	1
Eyeball	—	1	1
Spleen	1	—	1
Coccygeal gland	1	—	1
Unclassified	178	375	553
Total	1926	3630	5556

Appendix to Table II.

(*a*) The seats of the disease were as follows (omitting rodent ulcer):—

Seat.	Male.	Female.	Total.
Cheek	39	18	57
Neck	11	9	20
Eyelids	12	6	18
Nose	11	5	16
Scalp	8	1	9
External ear	3	2	5
Orbit	3	—	3
Forehead	1	1	2
Chin	1	—	1
Unclassified	22	1	23
Total	111	43	154

(*b*) Penis 70, scrotum 56, vulva 65, vagina 28, clitoris 6, nymphæ 3.

(*c*) Seat.	Male.	Female.	Total.
Leg	14	3	17
Foot	8	7	15
Thigh	6	8	14
Hand	12	1	13
Groin	4	3	7
Back	3	3	6
Chest	3	3	6
Hip	2	—	2
Abdomen	1	1	2
Axilla	2	—	2
Arm	2	—	2
Forearm	1	—	1
Unclassified	38	11	49
Total	96	40	136

(*d*) Colon: males 8, females 6 = 14. Sigmoid: males 9, females 4 = 13. Duodenum: male 1, females 3 = 4. Ileum: female 1. Ileo-cæcal valve: male 1.

[1] Abstract of a paper read before the Middlesex Hospital Medical Society, February, 1884.

TABLE III.

Showing Locality and Relative Frequency.

Sarcoma.	Total. Male.	Total. Female.	Grand total (both sexes).
Bones	138	117	255
Connective tissue &c.	113	97	210
Other parts	70	93	163
Unclassified	118	81	199
Total	439	388	827

Appendix to Table III.

SPECIAL SARCOMAS.

Bones.

——	Male.	Female.	Total.
Face (nearly all of the jaws—chiefly the upper)	54	50	104
Femur	19	19	38
Humerus	8	3	11
Scapula	6	3	9
Fibula	6	3	9
Tibia	5	3	8
Innominate	3	4	7
Skull	4	3	7
Ribs	3	1	4
Foot	2	1	3
Radius	—	3	3
Ulna	1	1	2
Clavicle	1	1	2
Hand	—	2	2
Coccyx	—	2	2
Sternum	—	1	1
Total	112	100	212

Connective Tissue &c.

——	Male.	Female.	Total.
Face	8	7	15
Neck	9	6	15
Thigh	4	8	12
Orbit	7	2	9
Palate	3	5	8
Groin	7	1	8
Leg	3	4	7
Scalp	4	2	6
Arm	4	1	5
Popliteal space	2	2	4
Mediastinum	2	2	4
Abdominal wall	2	2	4
Upper lip	1	2	3
Forearm	—	3	3
Shoulder	2	1	3
Foot	1	—	1
Axilla	—	1	1
Thumb	1	—	1
Buttock	1	—	1
Ischio-rectal fossa	—	1	1
Total	61	50	111

Other Parts.

——	Male.	Female.	Total.
Breast	2	54	56
Testicle	18	—	18
Choroid	9	5	14
Parotid	5	8	13
Retina (glioma)	7	4	11
Skin	4	7	11
Multiple	2	3	5
Rectum	4	1	5
Kidney	2	2	4
Lymphatic glands	2	1	3
Bladder	2	1	3
Muscle	2	—	2
Prostate	2	—	2
External ear	1	—	1
Optic nerve	—	1	1
Vulva	—	1	1
Submaxillary gland	1	—	1
Uterus	—	1	1
Vagina	—	1	1
Nose	1	—	1
Colon	1	—	1
Mesentery	1	—	1
Tonsil	1	—	1
Thyroid	—	1	1
Pharynx	—	1	1
Total	67	92	159

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nullaautem estalia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

SEAMEN'S HOSPITAL, GREENWICH.

CASES OF UNUNITED FRACTURE.

(Under the care of Mr. G. R. TURNER.)

CASE 1. *Ununited Fracture of Tibia and Fibula of four years' standing, treated by Dieffenbach's Operation.*—B. W——, aged fifty-two, a carman, was admitted on October 9th, 1882. Nearly four years previously (on December 12th, 1878) he sustained an oblique fracture of the middle third of the left tibia and upper third of the left fibula from the passage of a cart wheel over the leg. He was admitted into the hospital under the care of Mr. Davies Colley, who has kindly supplied the following details:—"The fracture was very oblique. There was very little ecchymosis and only slight swelling. The house-surgeon does not mention the treatment, but no doubt it consisted of the application of a back splint with a foot piece and two side splints. Jan. 30th (house-surgeon's report): Leg taken down, good union, and in good position; to be put up in a Bavarian splint.—Feb. 3rd. Very good position, very little movement at the seat of fracture (not by myself). The letter does not say when he was discharged." The patient says that he was discharged with the leg in a plaster-of-Paris splint, and was told the bones were still ununited. It seems that he removed the splint and went to work. The fragments soon came to overlap, and he was unable to get about without a crutch. He does not appear to have had any further treatment, or to have reported himself at the hospital. The day before his second admission, nearly four years after the original accident, he fell down and bruised himself. The old fracture of the left leg was found to be ununited. There was no evidence of any recent injury to it. He was unable to lift the foot without support, or to walk except with the aid of a crutch. The patient looked healthy though pale. His urine was acid, and had a specific gravity of 1014; there was no albumen, sugar, or excess of phosphates in it.—Oct. 17th: Ether was administered, and a semilunar incision over the seat of fracture made down to the periosteum. The fragments were found overlapping and united by fibrous tissue. The lower end of the upper fragment of the tibia was set obliquely in front of the upper end of the lower fragment. The fibular fragments were similarly disposed at a higher level. Both upper and lower fragments of the tibia were drilled in two places and ivory pegs inserted. The pegs were driven into, not through, the fragments, and cut off level with the bone. During this proceeding the drill was accidentally thrust through the uniting fibrous medium. It was at once removed and inserted into the bone. The edges of the wound were united over the pegs, and the part covered with a carbolic gauze dressing. The fibular fragments were left untouched. The man suffered a good deal of pain the same evening, but otherwise did well. The wound ran an aseptic course and healed by first intention. A fortnight after the operation the skin became red over the upper end of the tibia, and a small abscess formed in this situation. Some healthy pus was evacuated from this, but a sinus has remained ever since. It has not been found to lead down to bone or to any of the pegs. A month after the operation the patient could lift the foot off the splint without assistance, and the limb was put up in a silicate of potash splint. He was discharged on Dec. 7th, 1882. When last seen, June 15th, 1883, he could walk well without a stick; there was much less wasting of the leg, which was daily getting stronger. The union of the fracture seemed good, though the patient was conscious of some very little movement between the fragments when the whole weight of the body was thrown on that side.

CASE 2. *Ununited Fracture of the Tibia and Fibula treated by Dieffenbach's Operation.*—A. H——, aged twenty-six, a sailor, broke his right leg on Nov. 13th, 1881, in the Brazils. The leg was allowed to rest in a cradle, and remained thus for six weeks. No splints at all were used.

It was found that the fragments were riding, so the fracture was reset and the leg done up in a starch bandage, which was kept on for thirty days. When taken off the fragments were found to be loose. No bandages or splints were applied, but the patient was allowed to walk about with a crutch for about two months. He then came to England, and was admitted into the Seamen's Hospital in March, 1882. He was treated by rest and plaster-of-Paris and silicate of potash bandages. The union in July seemed to be a little more firm. He then was obliged to return to Sweden for a time. On coming back to the Seamen's Hospital it was found that little if any real improvement had taken place, and, as the fragments were still loose and ununited in November (a year after the accident), it was decided to operate. The patient was a young healthy subject. His urine was free from excess of phosphates or albumen and had a specific gravity of 1015. The operation was performed on Nov. 17th, 1882, and was the same as in the preceding case. The condition and position of the bones were also almost identical in both cases. Antiseptic precautions were used in each. The wound healed by first intention, and there was never the slightest pain or redness about it. The union very soon became firmer.—On Dec. 5th the limb was put up in a silicate of potash splint. He was eventually discharged on March 30th, 1883, with perfect union.

CASE 3. *Ununited Fracture of the Tibia and Fibula; Considerable Inversion of the Foot; Resection of the Fragments and Removal of three quarters of an inch of the Fibula.*—Carl F——, aged twenty-five, a sailor, was admitted on Feb. 12th, 1883, with an ununited fracture of the left leg, at the junction of the middle and lower thirds. The foot was much inverted, and he hobbled about with difficulty with the aid of a stick. The upper ends of the lower fragments projected outwards, forming a considerable angle with the lower ends of the upper ones. He had received the fracture eighteen months previously, and had been treated in an American hospital. He removed his splints, and went about without any support sooner than he should have done. The displacement of the bones, slight at first, gradually became so great that he applied for admission at Greenwich. The patient was a young, healthy subject. Ether was administered, and Esmarch's bandage applied to the limb. A semilunar incision was then made over the seat of the fracture, and the bones exposed. The tibial fragments were displaced outwards, and over-riding. They were coated with, and connected together by, fibrous tissue, a false joint existing between them. The fibular fragments were bound to each other by the same material. The ends of the bones having been refreshed, an attempt was made to bring the limb straight. It was not, however, until about three-quarters of an inch of the upper fibular fragment had been removed that this could be effected. In doing this a small flap of skin was dissected up on the outer side. Antiseptic precautions were employed during the operation and throughout the treatment of the case. The wound ran an aseptic course, and there was no constitutional disturbance, although part of the small flap of skin on the outer side sloughed, leaving that part of the wound to heal by granulation. The leg, in very good position, and the fracture united, was put up in plaster-of-Paris about the eighth week. This had, however, to be taken off, as a small sore formed underneath it, over the outer side of the wound where the slough had been. When this splint-gall had healed he was allowed to go about without any support to the leg, and could walk perfectly well.

CASE 4. *Ununited Fracture of the Humerus, treated by Resection and Wiring together of the Fragments.*—C. B——, aged forty-eight, a sailor, on Jan. 26th, 1883, was knocked down by a heavy sea, and broke his left arm in his fall. No treatment of any kind was adopted until he came to the hospital on the fourth day. The left arm was then enormously swollen with extravasated blood, very much bruised and discoloured. At the junction of the middle and lower thirds on the outer side was a wound leading down to a comminuted fracture of the humerus. The swelling was so great and the integuments so inflamed that it was impossible to determine with any accuracy the position of the fragments. Both radial and ulnar arteries could be felt at the wrist. The fracture was treated antiseptically and the limb laid on an inside angular splint. When the swelling had subsided it was seen that the humerus had been broken at the junction of the lower and middle thirds; the upper end of the lower fragment projected outwards towards the wound and was denuded of periosteum; the upper fragments lay to its inner side. Some portions of necrosed bone were removed from time to time and the fracture as far as possible kept in position. It was not until the middle of May that the wound had healed. There was then no union of the fracture, and the fragments seemed to be laterally displaced. It should have been noted above that an abscess, caused by a necrosed fragment, formed on the inner side of the arm and largely increased the already great difficulty of keeping the bone in anything like position. He left the hospital and went for a sea voyage, returning in June. As there was not the slightest attempt at union, on June 29th ether was administered, and the ends of the bone exposed; the lower lay outside and overlapped the upper one. Both were pointed and slightly atrophied, only a little fibrous tissue uniting them. The ends were refreshed by the chain and keyhole saws, and united by a stout silver wire. This was not passed through the whole thickness of the bone, and was made to project through the wound. Esmarch's bandage was used, and the operation performed with antiseptic precautions. Slight redness, due to carbolic-acid irritation, was present for two or three days, but otherwise the wound did well. The wire was removed about three weeks after the operation, and the wound healed shortly afterwards. In about six weeks' time the union appeared firm. The elbow-joint since the accident had been stiff, although the fracture was not found to communicate with it. In the end of January, 1884, under ether, an attempt was made to move the joint, but it was fixed and immovable. The fracture after this proceeding was found to have given way, although all possible gentleness had been employed. Splints were reapplied, and the bone united kindly by February 27th, 1884.

CASE 5. *Ununited Fracture of both Bones of Forearm, with Adhesion of the two Lower Fragments, treated by Resection and Wiring.*—J. P——, aged twenty-six, a sailor, four months before his admission broke both bones of the right forearm and was treated for nine weeks in side splints. When these were left off the bones were found to be ununited. He states that he kept his arm steady the whole time it was in splints and cannot account in any way for the bones not having united. The arm being perfectly useless he came to the hospital on August 23rd, 1883. On admission he was found to have an ununited fracture of both bones of the forearm about two inches below the elbow-joint. There was moderately free and smooth movement of the lower fragments upon the upper, and both were bent obliquely inwards. The non-union of the ulna was distinctly to be made out; that of the radius was not so obvious. The patient was a healthy young Swede. Urine normal.—Sept. 14th, 1883: Ether was administered and the bones exposed by two incisions, some three inches long, one over the radius, the other over the ulna. The ends of the fragments were found coated with cartilage and united by a little fibrous tissue around them. The lower fragments were joined to each other by bone, and had to be separated by the bone forceps. Both fragments, upper and lower, of each bone were resected by means of the chain and keyhole saws, and united by stout silver wire. The latter was not passed through the whole thickness of the bones, and was made to project through the external wounds, having been twisted three times from right to left. Esmarch's bandage was employed during the operation, which was carried out under antiseptic precautions. Three days after the operation some of the superficial stitches had to be removed to relieve tension; otherwise the man did well, the wound running an aseptic course. The wires were allowed to remain until Nov. 9th; some little difficulty was experienced in removing that in the ulna; finally it was cut short, and a small piece (a bit of the loop) left in the bone. Notwithstanding this the sinuses soon closed. It was then, early in December, found that union of the ulna had occurred, but on passive pronation and supination it was not clear that the head of the radius moved with its lower end as much as it should have done. There was also some little loss of power of flexing the two inner fingers. This however gradually disappeared, and the power of rotation acquired. In March the latter was very fair, and evidently performed at the superior as well as at the inferior radio-ulnar articulation, the head of the radius distinctly moving during its performance.

CASE 6. *Faulty Union of Tibia and Fibula; Osteotomy.*—C. H——, aged twenty-six, a sailor, in December, 1882, sustained a fracture of the left leg from direct violence. An old fisherman "set" the fracture and put it up in a number (about twenty) of thin straight splints fastened with bandages.

He walked with a crutch and a stick after some weeks' rest. It was not until June, 1883, six months after the accident, that he consulted a surgeon and was admitted into the Marine Hospital, Quebec. The bones had then united but at a very considerable angle, and the foot was much inverted. He had so much discomfort and pain in getting about that the limb was practically useless to him. He remained for two years and a half in hospital, and then came to England and was admitted into the Seamen's Hospital in October. On November 2nd ether was administered and both bones of the leg divided by means of the saw and chisel just above the seat of the old fracture. The leg was then with comparative ease brought straight and put up in a back splint with a foot piece and two side splints. Antiseptic dressings and precautions were employed. The wound ran an aseptic course and healed by first intention. After three weeks the limb was put up in a silicate of potash bandage. Good union of the bones resulted, and the recovery of position was perfectly complete. He was discharged in March, 1884.

The success attending these operations must, I think, be attributed to the fact that the non-union of the factures was in all due to local rather than constitutional causes. The too early disuse of splints, or obliquity of the fracture, induced non-union in the simple cases, necrosis and comminution of the fragments in the compound. The patients, except in two cases, were young, healthy seamen, and the bones had undergone little, if any, atrophic change. The urine in all the cases was normal.

WEST LONDON HOSPITAL.

CASE OF OPIUM-POISONING; SUBCUTANEOUS INJECTION OF ATROPIA; RAPID RECOVERY; RELAPSE; ULTIMATE RECOVERY.

FOR the following notes we are indebted to Mr. H. H. Taylor, house-physician.

G. R——, aged twenty-eight, married, was admitted. There was no history of insanity in the family. Patient had always been a temperate man, quiet in manner, and a good husband. About five years ago he had a sunstroke, since which a very little drink would "get into his head." A year or two ago, when he had a good deal of mental worry, he attempted to take laudanum, but was prevented doing so. Lately he had been out of work and rather depressed. On the morning of Dec. 3rd, 1883, he left home in order to seek work. During the forenoon his wife, who was out at work, was sent for, and found him very drowsy, saying he wanted to be put to bed. She suspected he had taken something, and sent for a medical man. He was afterwards seen by two medical men, who washed out his stomach and injected strong coffee. They walked him about the yard for some time, but as he got worse they sent him to the hospital. A six-ounce bottle was found with recent red labels on from three different chemists.

On admission into the hospital he was in a very drowsy condition; the pupils were minutely contracted; the pulse was slow and full; and the patient could not be made to walk, nor did he seem to understand when spoken to. Electricity was applied, he was well rubbed, slapped with a wet towel, and ether was injected; as he became rapidly more comatose half a grain of atropia was injected subcutaneously. In less than five minutes the pupils became widely dilated; he sat up with support, and said he felt he should be all right now. The battery was applied to the spine, to which he objected, and desired its discontinuance. Improvement continued for about half an hour after injection, when he became suddenly comatose, breathing entirely ceased, and he became quite black in the face; but the pulse continued good. Artificial respiration after Howard's plan was resorted to, but with scarcely any apparent effect. Silvester's method was also adopted, but with no better result, as ultimately no air seemed to be entering his chest. Still the pulse could be just felt; and Marshall Hall's plan of rolling the patient on to his face and then turning him suddenly back again was tried. This plan elicited a short gasp each time, and it was continued for nearly two hours and a half. At length the patient's lower lip seemed to get a little more colour, and gradually the colour of the whole face improved; but when left to himself he made no attempt at respiration, but he could be made to breathe by gently squeezing his ribs. He was then put to bed with hot flannels and bottles, and a brandy enema given. It was found necessary for some one to sit by him for some hours, as he would cease breathing, and his ribs had to be pressed to make him continue to do so. He was slightly delirious in the night, and passed very little water, which was albuminous. In the morning he was conscious, but much exhausted. The bowels were extremely confined, and he was troubled with general bronchitis. He ultimately made a slow recovery.

Remarks by Mr. TAYLOR.—The physiological effect of the atropia was soon apparent. Such a large dose as half a grain was given because recommended by Dr. Johnston, who appears to have great experience in such cases. The patient was wonderfully improved for half an hour afterwards, but then lapsed into a worse state if possible. It would have been interesting to have seen the effect of another dose of atropia; but, perhaps, the termination of the case might not have been so satisfactory as far as the patient was concerned. I may mention that in our hands Hall's method of artificial respiration was most efficacious, and it was most certainly the easiest and least tiring.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Bromide of Potassium Eruption.—Cerebral Aneurisms.—Pulmonary Aneurisms.—Multiple Stricture of Small Intestine.—Symmetrical Aneurism of Middle Cerebral Arteries.—Tumour of Petrous Portion of Temporal Bone.—Congenital Malformation of Heart—Congenital Talipes Calcaneo-valgus.—Congenital Xanthelasma.

THE last meeting of the session was held on the 20th inst., Mr. J. Whitaker Hulke, F.R.S., President, in the chair. The proceedings were greatly embarrassed by the wealth of specimens; several communications had to be taken as read.

Mr. BUTLIN read three reports of the Morbid Growths Committee. The first was that of Dr. Burney Yeo's supposed cast from the Trachea. There was nothing to add to the description of the microscopical characters, but the committee were decidedly of opinion that the cast was some tissue of vegetable origin. The second related to Mr. Lawson's specimen of Congenital Tumour of the Orbit, to which nothing was added in respect of microscopical description. It was allied to the "mixed embryonic tumour" of Cornil and Ranvier. The third dealt with Mr. Fred. Treves' specimen of supposed Actinomycosis. This was regarded as a large-celled sarcoma, with certain microscopical peculiarities in the cells, which were in parts irregular in size and shape and seemed to show transitions between the tissue of the stroma and the cellular elements.

Mr. WAREN TAY read notes for himself and Dr. STEPHEN MACKENZIE of a case of Bromide of Potassium Eruption, with microscopical sections. The child had taken 4½-grain doses of bromide of potassium two or three times a day. About ten days afterwards an eruption resembling chicken-pox appeared on the thigh; these spots were seen by a medical man, who touched them with nitrate of silver. On the twelfth day of the eruption several circular elevated discs were seen, around the margin of which isolated definite vesicles were scattered. The loins were chiefly affected; there were none on the feet, hands, face, or neck. In one month subsidence of the eruption had set in, but the disease remained till six weeks after the last dose of bromide of potassium. Microscopical sections showed in all parts of the skin many pus-cells in the corium and in the immediate vicinity of the hair-follicles. There were many cavities containing pus, and blood-corpuscles in the rete Malpighii, some quite isolated. The papillary layer of the corium showed great distension of the bloodvessels, and numerous small round cells infiltrated the middle and deeper layers of the true skin. The stratum corneum in some sections was wanting. The loculi in the rete might have resulted from vacuolation of cells or displacement, and were in places filled with amorphous granular matter, which stained deeply. The cells of the root sheaths of the hair-follicles had become embryonic. The sweat-glands were unaffected. In brief, there was inflammatory hyperæmia of the corium with extravasation of blood and infiltration with small round cells. The clinical features were thus amply explained.—Mr. HULKE said that, so far

as he knew, this description of the microscopical appearances was the first on record.

Dr. CHARLEWOOD TURNER read a paper on Cerebral Aneurisms. In one specimen the left internal carotid with middle cerebral arteries was exhibited. An irregular rounded coagulation was attached to one of the small branches of the artery, and much irregular enlargement of the arterioles could be seen; also many minute nodules, in part composed of miliary aneurisms, and in part of aneurismal dilatation, showing a finely fibrillar network, probably the remains of a blood clot from which the blood-corpuscles had in part disappeared. The inner coats presented a nuclear and fibro-nuclear infiltration, and in places an arteritis of much greater intensity. The limited fusiform enlargements were due to great swelling of the inner and middle coats, and sometimes a fibro-nuclear swelling of the outer coat existed. In some cases much fibrous thickening of the inner coat seemed to be due to former perivascular hæmorrhage, which was indicated by cells having a yellowish pigment. This specimen was taken from a man who had died of a sudden apoplectic attack with right-sided paralysis. An extensive hæmorrhage was found on the left side of the brain, lacerating the corpus striatum, and nearly separating it from the optic thalamus. The man was well developed, but poorly nourished, and had suffered from epistaxis and headache. There were granular kidneys with emphysematous lungs. The second specimen showed no minute nodules, but in places a few aneurismal expansions. Here the right middle cerebral artery was affected with irregular fusiform enlargements and hæmorrhages into the sheath of the artery. There was fibrous thickening of the adventitious coats of some vessels. The specimen came from a man aged fifty-nine, who was found in an insensible condition. He was a painter of intemperate habits. An extensive destruction of the right corpus striatum, with intra-ventricular hæmorrhage, had resulted from the vascular disease. There was no atheroma of the arteries at the base of the brain. There were granular kidneys. The heart was not noticeably hypertrophied, and weighed 11 oz. The specimens, he said, confirmed the opinion he had formerly expressed—viz., that hæmorrhage was an accident of an arteritis affecting the cerebral arteries to a greater or less extent, and leading to the giving way of the vessel wall under the influence of blood pressure, rather than the result of rupture of preformed miliary aneurisms. In two out of seven cases of cerebral hæmorrhage he had detected no defined aneurism and only ill-defined sacculated structures. Another specimen of true aneurism was shown. It was the size of a cherry, and situated at the distal extremity of the basilar artery. It caused the death of a man aged fifty-two. A large extravasation about the pons had burst into the right lateral ventricle. There was but little thickening of the mitral and aortic valves, the kidneys were granular, and the metatarso-phalangeal joints showed signs of gout. Another aneurism, the size of a split pea, situated on the anterior communicating artery, was taken from a man aged thirty-three, a painter, who died in a fit of general convulsions.

Dr. HADDEN showed a case of Symmetrical Aneurisms of the Middle Cerebral Arteries. The patient, a woman aged forty-nine, was admitted with right hemiplegia and hemi-anæsthesia. She became comatose, had convulsions, chiefly affecting the right side, and died five hours after admission. At the necropsy hypertrophy of the left side of the heart, but no valvular disease, was found. The kidneys contained a few cysts, but were otherwise healthy; a calcareous bar ran lengthwise in the position of the hilus of the spleen. Much blood was effused in the subarachnoid space all over the brain. The hæmorrhage was due to the rupture of an oval aneurism about one inch long involving the left middle cerebral artery. The aneurism was sacculated, and arose from the upper part of the vessel near the perforating arteries. The sac had ruptured posteriorly, the blood making its way into the white matter of the left hemisphere through the roof of the fissure of Sylvius; there was no extravasation into the lateral ventricles. On the right side there was an aneurism the size of a pea, arising from the middle cerebral at its first bifurcation, and in the position of the perforating arteries. There was no evident degenerative changes in the arteries of the circle of Willis. The position of the aneurisms and their symmetry suggested the possibility of emboli as the exciting cause; but there were no vegetations on the valves, and only slight atheroma of the aorta. It was possible that the arterial change was syphilitic; but there was no information on this point.

Dr. PERCY KIDD read an account of some unusual cases of Pulmonary Aneurisms, which were remarkable, mainly in two respects—the presence of multiple aneurisms and the development of aneurisms in pulmonary cavities of acute formation. Case 1 was one of chronic phthisis in a woman, aged thirty, who died of fatal hæmoptysis; her father died of apoplexy, her mother of phthisis. A brother suffers from phthisis and spits blood. The right lung was universally adherent, and contained scattered small cavities; twenty-two aneurisms of the pulmonary artery were found in the cavities, varying in size from a hemp seed to a small pea. The walls of the aneurism were thickened in all instances, and with one solitary exception were unruptured. Most of the aneurisms were situated towards the lower part of the lung. Case 2 was that of a woman aged twenty-six, with acute phthisis and universally adherent left lung. Two aneurisms—one as large as a pea, the other the size of a small bean, and both of fusiform shape—were discovered in an irregular basic cavity, with soft caseating walls evidently of acute formation. The branches of the pulmonary artery affected were quite unsupported on all sides. Walls of aneurisms were thickened without being ruptured. Case 3 was that of a woman, aged twenty-six, with a trabeculated excavation of the entire left lung. Three unruptured aneurisms were found, one at the apex as big as a hemp seed and two of the size of peas close to each other at the base; the walls of the aneurisms were thickened. Case 4 was one of chronic phthisis in a man, aged twenty-eight, who died of fatal hæmoptysis. The left lung was universally adherent, old cavities were present in the upper lobe, and an irregular cavity with soft caseous walls was situated at the base. In the latter cavity was a ruptured fusiform aneurism, which had developed on a large exposed branch of the pulmonary artery running across the cavity. The walls of the aneurism were rather thin; rupture had occurred by the formation of a small linear slit in the aneurism. The pathology of pulmonary aneurisms had been practically exhausted. There was little to be added to Dr. Douglas Powell's account of the subject in the twenty-second volume of the Pathological Society's Transactions. The aneurisms usually occur in chronic cavities as the result of a withdrawal of the support of the surrounding tissues. The aneurisms commence probably as local thickenings of the intima (endarteritis). The other coats may participate in the thickening subsequently. The development of aneurisms in acutely formed cavities is probably due to their situation at the base of the lung, where the respiratory movements are most active, and tend to retard thrombosis in the vessels of the cavities. Adhesions of the lung to the diaphragm probably helped to make matters worse by interfering with the free play of the lung. Out of 230 cases of pulmonary phthisis aneurisms of the pulmonary artery were found in 26. In 17 cases rupture of an aneurism had occurred; in 9 there was no rupture. Hæmorrhage was the cause of death in 21 cases. In 17 this was due to a ruptured aneurism; in one case to bronchial ulceration extending into the pulmonary artery, and in another to ulceration of vessels in a large cavity. In 2 cases the source of the hæmorrhage could not be ascertained, though an unruptured aneurism was present in one of the cases. The aneurisms were found in cavities in all cases, and their walls were usually thickened, except at the point of rupture. The cavities in question were situated in most cases in the lower two-thirds of the lung, and they were rarely of large size. The cavities mostly varied in size from a walnut to a Tangerine orange. These facts confirmed the generally accepted view that in the great majority of cases of phthisis in which fatal hæmoptysis takes place, the hæmorrhage is due to rupture of an aneurism in a pulmonary cavity.—Dr. SAMUEL WILKS was decidedly in favour of the view here expressed. Fatal hæmoptysis was associated with reparative processes, and was not due to the destruction of the lung. In such cases there was frequently a long history of phthisis of localised nature. The prognosis was doubtful. The clinical and pathological facts were perfectly in accordance.—Dr. SAMUEL WEST remarked on the fact that there were a large number of cases of aneurism in which there had been no hæmoptysis.

Dr. SEYMOUR SHARKEY read notes of a specimen of Multiple Stricture of the Ileum, taken from a woman aged thirty-three, who was the sole survivor of a family of eight children. She had always been weakly and ailing, and had suffered from indigestion and vomiting. The catamenia were never regular, and amenorrhœa had existed for twelve months

before death. There was abdominal pain, diarrhœa, and vomiting, though with good appetite till two months before admission. The present state revealed no tenderness and no evidence of local disease. The pulse was 144, small and weak. The urine had a specific gravity of 1025, contained no albumen and no sugar. The pain, diarrhœa, and vomiting were all more or less amenable to treatment. An attack of facial erysipelas closed the scene. At the autopsy the great omentum was adherent; there was no disease of the lungs, heart, spleen, or brain. The kidneys were small and their capsule slightly adherent. The lower two-thirds of the small intestines exhibited numerous ulcers, apparently healed. They were of two chief kinds: first, small, like typhoid ulcers, with sharply cut edges and peripheral pigmentation; secondly, huge ulcers, completely encircling the gut, with sharply defined outline, and the mucous membrane appeared to run smoothly over their bases. They were so near together and produced such marked constriction that the appearance of a succession of pouches was simulated. There was no distinct evidence of tubercle, though some white dots might be of this nature. The Fallopian tubes were thickened and infiltrated, obviously tubercular. Sections of the intestines showed the mucous membrane transverse and longitudinal muscular coats to be infiltrated with cells which stained well with logwood, except those near the surface. The infiltration was most intense in the mucous coat, the peritoneum being almost unaffected. There was but little tendency to formation of giant cells, leucocytes were mostly resembled, and some were like the cells of granulation tissue. The glands and villi were absent from the mucous membrane of the ulcers. The appearances were those of inflammation. No bacilli had been found in the new-celled growth, and there were no centres of caseation. It might possibly have been a recent tubercular formation. The remarkably small intervals which separated them from one another, the extreme extent of the affection, the fact that no tubercles were present in the peritoneum and that the outlines were all regular, together with the microscopical anatomy not being that usually found in tubercle, served to characterise this condition as rare.—Dr. MAHOMED thought that there were signs of tubercle in the intestines.—Mr. TREVES spoke of other somewhat similar recorded cases in which both typhoid fever and tubercle seemed to be excluded. The case described by Kœberlé, in which two metres of intestine were resected, was mentioned. Another specimen was to be found at St. Thomas's Hospital Museum. Here multiple strictures of the small intestine existed which were not typhoid nor tubercular.—Dr. PERCY KIDD asked whether bacilli had been found in the diseased tissue of the Fallopian tube.—Dr. SHARKEY replied in the negative to this, and said the temperature had been 101°, but was usually normal or subnormal. The mesenteric glands were not diseased, and unless certain small points were tubercular, of which he had his doubts, he could not agree with Dr. Mahomed.

Mr. CHAVASSE exhibited a specimen of Tumour of the Petrous Portion of the Temporal Bone removed from a widow, aged forty-two, who was first seen in Sept. 1883. The history showed that seven years before a small lump had appeared in the left frontal region, possibly from a blow there a month previously. It had increased in size almost imperceptibly, and was attended with pain of a smarting and aching character. The face became drawn to the left side, and a swelling developed in the left parotid region. The temporo-maxillary articulation was free from disease. There was marked emaciation. He tried counter-irritants and anti-syphilitic treatment without effect. A surgical operation was performed, in which the angle of the jaw was sawn through and the ascending ramus removed. The petrous portion of the temporal bone was divided, and the foramen ovale was reached. Some days after pyrexia appeared, and double pneumonia was diagnosed, from which, sixteen days after the operation, the patient succumbed. Some rough bone round the foramen ovale was to be felt at the autopsy, and the infra-maxillary nerve could not be detected. There were some sloughy cavities about the bases of the lungs. The new growth was pear-shaped, and had at its apex a small cyst containing a serous fluid. Much of the tissue was densely fibrous; in these homogeneous masses many canals with no proper lining were to be seen, but containing some granular amorphous substance, with some varying sized deeply stained cells. In another place the appearance of a transverse section of a nerve was simulated; also a loculus, with epithelial cells. Mr. Chavasse was still rather uncertain of the exact nature of the tumour, and agreed that the specimen should be submitted to the Morbid Growths Committee.

Mr. SHATTOCK gave a brief account of a Malformation of the Heart. It was a biloculate heart from a new-born child. The upper and lower cava were normally disposed; but the pulmonary veins were confluent on the back of the auricle without having any communication with its cavity. A communication through the bronchial or posterior mediastinal veins and the pulmonary veins has been shown by Zuckerkardt to exist. The condition tallied with the established embryological fact that the pulmonary venous system is formed independently in the lungs, though the manner in which they joined the heart is not yet determined. Whether the present specimen represents a stage in this process remains to be shown.

Mr. PARKER and Mr. SHATTOCK read a paper on the subject of Congenital Club-foot, in continuation of a former communication, in which they advocated a mechanical cause for the deformity. Their opinions rested on a careful dissection of five cases (three of talipes varus and two of talipes calcaneus), and on a study of specimens in various London museums. The contention was that there is nothing special in club-foot, and nothing which does not occur in other joints as well as in the foot. In one of the cases there was absolute histological integrity of the nerve centres, of the nerve-trunks, and of the muscles of the limb, but some extra obliquity existed in the neck of the astragalus. In another case, however, there was no malformation in the astragalus. Hence, then, the insufficiency of the usually accepted nerve theory of causation, and of the theory that the deformity depends on the conformation of the astragalus. It was further shown that the conformation of the astragalus met with in most cases of talipes was the normal condition in the higher apes, although these animals are not talipedic. Thus it appeared to the authors that some additional force was required. This they seek in the environment of the fœtus during the intra-uterine life; and as additional proofs of pressure (besides the talipes) they related instances of torsion of the bones of the leg and of the astragalus, and also a case in which depressed patches of atrophied skin with bursæ beneath were found on the external malleolus and on the head of the astragalus, comparable with what is found in persons who walk on an unreduced talipes. The varieties of varus and calcaneus were thought to depend on the date of onset of the deformity, and in both cases were exaggerations of positions which were normal at some time or other of fœtal life.—Dr. MAHOMED had seen a remarkable case of tetany neonatorum, which he described.

Dr. BARLOW showed drawings of a case of Congenital Xanthelasma taken from a boy, aged seven years, with typical chamois leather patches, situate on the eyelids and a little external, also about one shoulder. There was orange-coloured staining on the tops of the ear, and the vaccination scars had an orange-coloured pigment. Xanthelasma is a disease mainly of adult life and old age, but it did affect young people, and cases of congenital xanthelasma had previously been exhibited by Dr. Stephen Mackenzie. It was also hereditary, and was to be seen in two or three members of one family. In the congenital cases it did not affect the classical situations, but tended to occur nearly all over the body. Hepatic disorder was laid stress on by Mr. Hutchinson. In this case there was no obvious sign of hepatic disease, but signs of renal calculus in the shape of hæmaturia and the passage of uric-acid crystals were present, and might be secondary to hepatic disease. The father of the boy was the subject of relapsing psoriasis, and the paternal grandfather had had severe gout.

The following card specimens were shown:—Dr. Sharkey: (1) Cystic Squamous Epithelioma; (2) Stricture of Stomach and Œsophagus with Atrophy of Stomach. Mr. Chavasse: Tumour of Skull. Mr. Shattock: Unusual Condition of Hydrocele Fluid. Dr. Silcock: Cancer of Prostate with Secondary Ossific Deposit in Cranium and Femur. Dr. Payne, for Dr. Handfield Jones: Preparations of Pale and Red Clots in Cerebral Arteries. Mr. Lockwood, for Surgeon Trevan, R.N.: Chyluria with Filariæ in the Blood and Urine (living specimen). Dr. Hobson: Malignant Disease of Cæcum. Mr. Morgan: Extensive Calcareous Deposit in Pleura. Dr. Hebb: (1) a Sponge-like Liver; (2) the Muscular Nerves and Spinal Cord in Diphtheritic Palsy; (3) Tubercle in the Wall of the Heart. Mr. Lane: (1) Tumour of the Bladder; (2) Partial Mollities. Dr. Hale White: Left Inferior Vena Cava. Mr. Poland: Suppurative Arthritis of Infants. Mr. Parker: Axillary Glands (recent specimen).

OBSTETRICAL SOCIETY OF LONDON.

AT the meeting of this Society, on May 7th, the President, Dr. H. Gervis, read the addresses of condolence which he had sent on behalf of the Society to Her Majesty the Queen and Her Royal Highness the Duchess of Albany.

The following specimens were shown:—Dr. Cleveland: A Fleshy or Deciduous Substance voided after labour by a patient who had already voided similar bodies on two previous occasions; it was probably the decidua from the unimpregnated half of a double uterus. Dr. Matthews Duncan: Microscopical Slides of an Angioma of the Labium Magus. Mr. Doran: Ruptured Secondary Cyst in the Wall of a Multilocular Ovarian Tumour. Dr. Horrocks: Rupture of Uterus and Vagina—longitudinal in direction. Dr. Chalmers: Cyst between Tube and Ovary in the Broad Ligament. Dr. Bantock: Four Fibrous Tumours of the Uterus removed by operation; the uterus in one case was pregnant.

Dr. ARTHUR MITCHELL read a paper on Strong Mental Emotion affecting Women as a cause of Idiocy in the Offspring. The author remarked that this cause is often assigned by the mother, but in most cases without reason, especially as more probable causes can usually be discovered occurring after birth. In some cases, however, he has convinced himself that this is the true cause, especially if the mental state has been protracted, and if the rapidity of developmental changes in the fœtus be considered. Such disturbance may act either as arrest or as misdirection, and probably through the bodily health of the mother. Sudden emotions may in some cases have a similar effect. Under such conditions patients have described violent fœtal movements following the shock, and afterwards a cessation of movements for some days. Such violent movements are probably convulsive, and, if so, quite capable of accounting for permanent mental damage. The paper concluded with an account of six cases drawn from 443 cases of idiocy or imbecility consecutively examined, with allusion to twenty-two other cases, making 28 cases observed in a total of 1500. In the twenty-two cases the evidence was less satisfactory. — The PRESIDENT solicited the opinion of those who, like Dr. West and Dr. Fletcher Beach, were specially acquainted with these cases. — Dr. WEST remarked that such statistics could not be trustworthy until compared with a similar series in which no such results had followed from the same causes. The latter class would, in his opinion, prove a large majority. His present opinion coincided with the verdict, "Not proven." — Dr. FLETCHER BEACH said that according to statistics collected by him in the Darenth Asylum, fright and other violent mental emotions accounted for about one-tenth of the cases in which histories could be obtained. But in many of these cases there was also intemperance, involving worry and anxiety to the mother, ill-usage from the husband, and want of food. In a large number of cases there was a history of insanity, imbecility, epilepsy, or paralysis in the parents.—Dr. CLEVELAND agreed with Dr. West. He related the history of a family of six, three of whom (each alternate child) were idiots. Both parents were sane. There was a history of insanity on the mother's side, but she had never herself been insane. Dr. MATTHEWS DUNCAN observed that Dr. Mitchell did not claim to have proved his thesis, but only said he had "convinced himself" of the truth of it; he (Dr. Duncan) thought he had made it highly probable. Dr. Mitchell had already shown that the age of the mother, the number of the pregnancy, and twinning influenced the offspring. Ancell had shown that the injurious or favourable influence of the number of the pregnancy extended over the whole life of the children to adult age, influencing the rate of their mortality. Such facts proved the grave effect of slight causes, and favoured the author's view.—Dr. HEYWOOD SMITH pointed out the omission from the paper of the date in utero-gestation at which the perturbing influence occurred. In physical deformity of the offspring the mental shock, to which the mischief was ascribed by the mother, happened, in his experience, generally between the third and fourth month.

A paper on a case of Extra-uterine Gestation, delivery of a living child per vaginam, removal of placenta, and recovery, was read by J. H. MATHIESON, M.D., St. Mary's, Ontario. The patient was aged thirty, the mother of five children. In November, 1880, menstruation (which had been regular, though scanty, for two months) ceased, and abdominal pain began. In Dec. 1880, a lump was noticed low down in the left inguinal region. She was first seen by the author in March, 1881, when she had a tumour rising to the level of the navel, filling the left inguinal region and extending two inches to the right of the middle line. The uterus could not be mapped out. The sound passed three inches and a half, slightly to the right side and in front of the tumour. There were occasional pain in the tumour, tenderness, and a feeling "like jelly moving," which made her feel sick, painful micturition, and irregularity of bowels. The tumour continued to enlarge, fœtal movements became stronger, and the pain more severe. On April 12th she had an attack of pain and nausea, with a pulse of 146, temperature 103·6°, cold extremities and cold sweat, relieved by morphia. A similar attack occurred on April 23rd, another on May 2nd, and another about May 18th. On June 2nd a somewhat similar attack was accompanied by pretty regular labour-like pains independently of fœtal movements and accompanied by a red discharge. The tumour continued to grow, and its most rapidly growing part was always the most painful. On June 13th occurred another attack, like the last, but the pains were bearing down, though no bulging during them could be felt per vaginam. On June 28th she had a very severe attack during micturition, followed by rapidly following attacks of syncope. The roof of the vagina was filled with a doughy mass, solid on deep pressure. Operation per vaginam was at once decided on, and performed without chloroform at the patient's request, by cutting with a knife and tearing with the finger-nail. The face of the child was found presenting, and was delivered by forceps easily. It was stillborn, but soon revived. The placenta was at the posterior and left side of the cavity, its lower border some two inches from the vaginal roof. It was easily peeled off, a sponge soaked in perchloride of iron following it up. There was very little bleeding. The clots were removed from the cavity, its walls were touched with perchloride, and the operation ended. Much exhaustion followed the operation. The child weighed 8 lb. 7½ oz., and appeared mature. The placenta was three-lobed, but was destroyed before a careful examination could be made. The after-treatment consisted in washing out the cavity antiseptically. The opening healed in three months. Severe pain in the side lasted for nearly two years after the operation. She was seen in August, 1883, in excellent health; had no pain except after great fatigue; had menstruated normally for six months. The child was healthy.—The PRESIDENT doubted the propriety of the vaginal operation and of the removal of the placenta. Each case had to be judged on its own peculiarities, but generally he was in favour of primary operation, abdominal section, and leaving the placenta.—Dr. PLAYFAIR disapproved of vaginal operation and of removal of the placenta. The case as related was most extraordinary, especially in regard to the labour pains described.—Dr. BANTOCK thought the case was one of tubal pregnancy, the tube giving way on its under surface, and that the fœtal sac had grown between the layers of the broad ligament.

The PRESIDENT read notes of a case of Cystic Degeneration of the Cervix Uteri. The patient, aged forty-five, had had nine children, the youngest five years old. The menopause had occurred three or four years previously to her admission, which was indicated by abdominal enlargement, which turned out to be due to obesity. The cervix was covered with close set, tense, glistening vesicles, varying in size from a millet to a hemp seed. There was no other abnormal appearance, and there were no uterine symptoms whatever, the vaginal examination having been indicated by the abdominal enlargement; on puncture nothing but air escaped, with an audible sound, the vesicle so punctured afterwards being indistinguishable, except for slight traces of the marks of the punctures.—Dr. HERMAN referred to the disease of the vagina and cervix described by Winckel as "Colpohyperplasia cystica," characterised by cysts containing air or gas.

The following remarks of Dr. BARNES on Dr. Kilner's paper were accidentally omitted from the report of the last meeting. Dr. BARNES had found faradism capable of initiating as well as intensifying uterine contractions, but he had discontinued its use partly on account of the pain it produced. Its power of lowering arterial tension might relieve the vomiting of pregnancy and other cognate disorders.

ACADEMY OF MEDICINE IN IRELAND.

A MEETING of the Surgical Section was held on Friday, March 7th.

Mr. BARTON read a paper on a remarkable case of Abdominal Tumour. T. A——, aged twenty-five, an engine-fitter, was admitted into the Adelaide Hospital on Nov. 27th last, suffering from a constant pain in the abdomen and painful and constant micturition. On examination a tumour was found in the left inguinal region; it was hard, nodulated, defined closely to the left side, but somewhat undefined towards the right mesial line. The sigmoid flexure could be traced to the tumour, which seemed to be attached to it. A history of three years of suffering was given, during which the rigors of intestinal irritation and obstruction and bladder irritation gradually but steadily increased in severity. On Dec. 17th Mr. Barton operated for the removal of the tumour. An incision about three inches long was made in the linea alba, just above the pubes. Through this he quickly obtained room to explore the pelvis, and ascertained that the tumour had no anterior attachment to the bone. The peritoneum was then opened, and the tumour was found to surround and grow from the sigmoid flexure of the colon. The tumour was partly excised, and the remaining portion firmly ligatured, the ligature being brought out of the wound. The patient recovered, the artificial anus being fully established on the fifth day. The tumour sloughed out. One month after the operation the patient was able to be up in an arm-chair, and expressed himself much better than before the operation, on account of the relief from the irritation of the bladder and his complete restoration to appetite and sound sleep. Three months after the operation there was no sign of a return of the disease, which was carcinoma or alveolar sarcoma.—Dr. SCOTT, who made sections of the tumour, said it was composed of epithelial-like cells, had a carcinomatous appearance, and in that view would be a secondary growth; but no primary growth was discovered; so that in the alternative he regarded it as an alveolar sarcoma in which the cells were of an epithelial character.

Mr. KENDAL FRANKS read a paper on a case of Excision of the Entire Tongue, the Left Tonsil, and part of the Velum Palati for Epithelioma. In the operation, which he performed in January last, he divided the cheek from the left angle of the mouth to the anterior border of the masseter muscle. The attachments of the tongue to the floor of the mouth and to the lower jaw were divided by means of a galvano-cautery loop without hæmorrhage. A suprahyoid puncture was then made into the floor of the mouth, and a galvano-cautery loop introduced through it was made to encircle the organ as far back as possible, so as to divide the tongue at its base. No hæmorrhage followed this division. The left tonsil, anterior pillar of the fauces, and the greater portion of the left half of the palate were removed with Paquelin's thermo-cautery. A little bleeding from a palatal twig had to be arrested. On Feb. 19th a hard and diseased gland was removed from behind the angle of the jaw, and had to be dissected off the internal jugular vein for about an inch and a half. This wound was quite sound in a few days. The mouth healed rapidly except for a small piece far back on the left side of the epiglottis, extending forward to the level of the tonsil, which progressed slowly and is not yet cicatrised. The pain, which before the operation was intense, had disappeared and the patient, though weak and disinclined to leave his bed, was now quite comfortable. The electric apparatus employed consisted of three storage batteries devised by Mr. Prescott of Dublin.—The PRESIDENT held that where the disease was extensive, and even where it was certain to return, the best course was operation, as the return of the disease, though fatal, would make death less painful. All the patients he operated on were placed in the recumbent position and under the influence of an anæsthetic. The adoption of Macewen's tracheal tubes obviated the danger of hæmorrhage and allowed the administration of an anæsthetic. He always used the thermo-cautery scissors, as the cold or unheated blade passing beneath the part to be severed helped to lift and support it towards the heated blade. In some of his operations he had secondary hæmorrhage, which was prevented since adopting the plan of not having the scissors quite so hot as formerly during the transverse cutting. He never passed a ligature through the tongue, but seized it with forceps invented for the purpose by Charrière. He usually slit the cheek, a procedure which he accredited to Mr. Colles. To the galvanic wire écraseur he objected, as it was impossible to tell whether the diseased parts were not merely cut into instead of being eradicated, and also because the battery for heating the wire could not be depended on. He agreed in condemning the écraseur.—Mr. THOMSON, speaking from his experience of the thermo-cautery, preferred the hot knife or the wire to either the ligature or the ordinary écraseur. With the hot knife, should any portion of tissue remain infiltrated with disease, there was the ability to go further with the operation at once, which was not so with the écraseur.—Mr. STOKES, having read a communication before one of the London Societies on the subject of excision of the tongue by the écraseur, was glad to find many English *confrères* endorsed his views. In a record of twelve cases there was not a single one of secondary hæmorrhage, and death was much rarer after the écraseur than any of the cutting operations or by the cautery. The absence of moaning and groaning during the operation was remarkable. Sir James Paget had drawn particular attention to the operation as practical and painless, sensibility being destroyed by pressure on the tongue. Therefore, though the operation was prolonged, the term "slow torture" was inapplicable. Statistics proved it to be safer than any other, and that after it secondary hæmorrhage was extremely rare. Celerity in dividing the tissues he did not consider an advantage, as where they were slowly divided there was less chance of secondary hæmorrhage, a disastrous sequela. Division of the cheek was recommended long before Mr. Colles was known as a distinguished surgeon. An important aid was a traction ligature of strong silk through the base of the tongue, to draw it forward and ligature the bleeding vessel if secondary hæmorrhage ensued.—Mr. W. THORNLEY STOKER condemned the use of either the ligature or the écraseur as methods worthy only of the middle age of surgery. The small proportion of fatal results after the écraseur was due to the fact that of late years its use was confined to cases which would have had a favourable termination whatever means were adopted.—Mr. FRANKS, in reply, contended that the instrument which would work most quickly was the great desideratum.

Dr. CAHILL, in a paper on Carbolic Treatment, claimed that antisepticism was superfluous, as fermentation never occurred in the vital fluids—blood, pus, serum, and lymph—until they died, and when once dead they should be removed. Dead contact, known as foreign body, killed them. He traced an analogy between blood and pus, in that both die in the largest containing vessels first, and that dead substance introduced into either surrounds itself with a zone of dead material; for instance, dead bone in pus. He attempted to prove that air was a foreign body by quoting the phenomena of canalisation and in other ways. He deprecated the system of classing a large number of drugs under the heading "antiseptics," and thought each substance should be regarded on its own merits, claiming that although antisepticism was useless, the carbolic treatment was highly valuable in wounds and sores of a strongly inflammatory tendency as devitalising or suspending vital processes in the tissue elements. In support of this view he instanced the effects of the spray on the hands of operators. Carbolism in preventing suppuration round sloughs, as adduced by Mr. Cheyne, was partly due to the same principle and partly to that property of carbolic acid by which it promotes the absorbent powers of granulation tissue.—Mr. THOMSON pointed out that Lister was by no means confined to the use of carbolic acid in his treatment, but used perchloride of mercury, eucalyptus, thymol, &c. He dissented from Dr. Cahill's conclusions, and said that Lister's system had the effect of reducing the death-rate, and practically wiping out in surgical practice pyæmia and septicæmia.—Dr. CAHILL said he did not attack carbolic acid, but Listerism, carbolic acid being in proper cases a very valuable drug; he quarrelled with Lister for using it indiscriminately in all cases, and thought Lister had done a great deal of harm by introducing antiseptic surgery. No doubt Lister used thymol, eucalyptus, &c., but he had gone back to carbolic acid, as mentioned in Cheyne's Surgery, which, according to Lister himself, was the best source of information as to his system

LEEDS AND WEST-RIDING MEDICO-CHIRURGICAL SOCIETY.

A MEETING of this Society was held on Friday, April 4th, Mr. W. N. Price, President in the chair.

Specimens.—Mr. HARTLEY showed (1) a case of Primary Syphilitic Sore of the Left Lower Eyelid, with Infection of Glands beneath the Angle of the Jaw; (2) a case of Symmetrical Persistence of a large portion of the Pupillary Membrane in both Eyes.

Paralysis of Cranial Nerves.—Dr. EDDISON showed a patient with paralysis of the muscles supplied by the third, fourth, fifth, and sixth nerves, and with almost complete anæsthesia of the parts supplied by the fifth, all on the right side. There was no paralysis of the muscles supplied by the seventh nerve. Taste was impaired on the right side, but the lingual muscles were unaffected. Dr. Eddison described various other symptoms, and remarked on the difficulty of deciding as to the most probable cause. Syphilis was referred to as a possible cause, but there was no certain history of an attack.—Mr. HEY, Mr. W. H. BROWN, Dr. CHURTON, and Dr. BARRS spoke.—Dr. EDDISON promised to bring the case forward again at a future meeting.

Determination of Albumen in Urine.—Dr. OLIVER demonstrated a ready method for the quantitative determination of albumen in urine. The proceeding consisted in comparing the opacity produced by a test-paper in a definite measure of the albuminous urine, with a standard of opacity which represented a known per cent. of albumen; and in adding water, when it exceeded the standard, until the two were seen to be exactly equal. The standard opacity (representing 0·1 per cent. of pure serum-albumen) was preserved in a permanent form by precipitating chemically pure alum by means of ammonia, the opaque fluid being sealed up for use in a short flat tube. The estimations were made in a flat graduated test-tube of a determined diameter, three-eighths of an inch. A definite quantity of the urine (twenty or forty minims, according as the urine was strongly or only moderately albuminous) was poured in, and the albumen was precipitated by either a ferrocyanic or a mercuric test-paper. The opacity almost at once produced was compared with that of the standard by placing immediately behind the tubes printed lines; when it overstepped it, the urine must be diluted to the required degree. The number of times the volume of the urine had been increased by dilution represented so many decimals per cent. of albumen; for example, twenty minims of urine requiring to be diluted to 180 minims contained ·9 per cent. Dr. Oliver showed, on taking the twenty-four hours' urine, how readily by this method the total amount of albumen daily discharged could be expressed in grains; it was only necessary to multiply the percentage by 4·36 (or roughly 4½), and the number of ounces of urine; for example, ·6 per cent. × 4·36 = 2·6 gr. to the ounce, × 50 oz. = 130 grs., total loss of albumen in twenty-four hours. In this way, he believed that accurate data could be provided without loss of time for comparing the effects of treatment on the amount of albumen eliminated; and he suggested that quantitative analysis of albumen might become useful in diagnosing the forms of renal disease.—Dr. S. C. SMITH remarked that the mercuric iodide papers precipitated albumen so rapidly that a certain quantity of coagulum remained in the meshes of the paper, and that in strongly albuminous urines this was so tenacious that comparatively little free precipitate appeared in the tube, hence in these urines the delicacy of the quantitative test was interfered with.—Dr. OLIVER, in replying, admitted that the mercuric iodide was so rapid a reagent that, when the quantity of albumen was great, it coagulated in the substance of the paper; and there certainly was a possibility of error from this cause with the reagent; but this was entirely avoided by diluting the urine prior to the use of the test-paper.

Early Maternity.—Dr. DOBSON related a case of early maternity. A girl who began to menstruate at eleven years of age was delivered by forceps of a male child in February last, being at that date thirteen and a half years of age. She had therefore become pregnant at the age of twelve years and three-quarters.

Herniotomy with Unusual Sequelæ.—Mr. H. E. SPENCER related the case of a very stout lady, aged sixty-eight, who had suffered from unreduced oblique inguinal hernia for many years. Strangulation had been manifest for thirty-six hours when Mr. Spencer performed herniotomy, opening the sac, and ligaturing and removing a bunch of omentum of the size of a Jargonelle pear. Constant vomiting and suppression of urine followed, lasting seventy-two hours, without symptoms of uræmia or albuminuria. The total quantity of urine passed in this time was under two ounces. The bowels had acted on the third day. After this, all went well until the fifth evening, when the pulse rose to 120, and slight mental disturbance was observed. On the seventh, the patient was completely comatose, with tightly contracted pupils. She died early the next morning. The temperature was subnormal throughout. Post mortem some early peritonitis was found, and the basilar artery was plugged with atheromatous matter. The kidneys were healthy. The points for discussion were the associated vomiting and suppression of urine, which the author was inclined to attribute to the omental ligature; and the peculiar brain-symptoms, which seemed to be the result of basilar thrombosis.

MIDLAND MEDICAL SOCIETY.

AT the meeting held at the Medical Institute, Birmingham, on April 16th, Dr. Bodington, President, in the chair,

Mr. BENNETT MAY read notes of a case of Hæmorrhage from the External Auditory Meatus treated by Ligature of the Common Carotid Artery. The patient had recently had scarlatina. Profuse arterial hæmorrhage set in on the twenty-third day of the disease and the third day from the appearance of suppuration within the meatus. The operation, which was followed by aphasia for three weeks, had been completely successful.

Mr. MAY also showed a woman, aged fifty years, whose upper jaw he had excised eighteen months previously for a Soft Round-celled Sarcoma expanding the cavity of the antrum. He considered the case illustrated the well-recognised immunity from recurrence which often attends the removal of these malignant tumours from this region when the disease is sufficiently circumscribed to permit complete extirpation.

Dr. MALINS exhibited an Enlarged Ovary and Dilated Tube, taken from a patient aged twenty-eight, married nine years, no family. From the same patient the remnants of a dermoid cyst of the opposite side were removed; two drainage-tubes were used, and withdrawn on the fifth day; the patient has since done well.

Dr. BARLING showed for Mr. BARTLEET a Stump of the Femur with Round-celled Sarcoma, removed at the hip-joint from a man aged twenty. The limb was amputated at the lower third of the femur nine months previously for sarcoma of the head of the fibula. After the amputation at the hip-joint, although little blood was lost, the patient suffered for some hours from profound shock, but is now practically well.

Dr. BARLING also showed a specimen of Epithelioma of the Tongue, removed from a man aged fifty-six. There was a history of about five months' duration. The growth affected the left side of the tongue and slightly the floor of the mouth. There were enlarged glands at the left angle of the jaw. The operation performed was as follows:—A horseshoe-shaped incision was made along the lower border of the inferior maxilla, a median incision, reaching from the symphysis to the hyoid bone; by dissecting down a small flap on each side each lingual artery was tied at the digastric angle. The tissues of the floor of the mouth were divided with scissors, then the base of the tongue severed close to the hyoid bone, and a ligature passed through the epiglottis. The enlarged gland was also removed. Hardly any blood was lost, and the patient bore the operation well. A drainage-tube was fastened in the floor of the mouth and opened into the neck in front of the hyoid bone. The after-treatment consisted in frequent syringing of the mouth with Condy's fluid, which ran out freely through the drain, and in the administration of nutriment, at first by enemata, afterwards by means of an indiarubber catheter passed through the nose. On the fourth day the right knee and wrist became painful and swollen, and the patient died on the sixth day, with these joints much distended. There were no rigors, and but little fever; there was no evidence of pneumonia. No autopsy was allowed.

Reviews and Notices of Books.

A Manual of Physiology, for the use of Junior Students of Medicine. By GERALD F. YEO, M.D. Dub., F.R.C.S. Pp. 632. With 301 Illustrations. London: J. and A. Churchill. 1884.

THIS work belongs both in size and scope to the well-known series of manuals published by Messrs. Churchill, and is the legitimate successor of the similar treatise by Dr. Carpenter, which, excellent as that was at the time it was written, has, we suppose, been found so defective as to require more time and trouble to renovate than would be demanded to write a new work. We think Messrs. Churchill have done well in selecting Dr. Gerald Yeo for the author of their new manual. This gentleman occupies the physiological chair at King's College, has a good reputation as a teacher, and is known as having ably assisted Dr. Ferrier in the interesting researches made by that physician on the localisation of function in the brain. The plan followed in the work is to give in the first place a general view of the animal structures, then to describe the chemical basis of the body and the vital characteristics of animal organisms, and next to consider in succession, and in the following order, the functions of digestion, absorption, circulation, respiration, secretion, animal heat, muscle, voice and speech, the nervous system, special senses, reproduction, and development.

In dealing with his subject, Dr. Yeo has introduced in many places a brief account of the histological features of the parts of which he is about to show the physiological use. This plan has its advantages and its disadvantages. It serves to instruct the student upon the more important structural points which bear upon the function of each organ; but, on the other hand, it is apt to lead him to think that nothing further need be known, and consequently to neglect other and equally fundamental facts. In some cases, as, for example, in the description of the heart, Dr. Yeo has occupied four or five pages with illustrations, and with anatomical details with which the student might reasonably be expected to have familiarised himself in the dissecting-room. Allowance must be made in a book of this kind for the space at the author's disposal, but we think some points have been omitted that the student should know. Thus, whilst there is a brief description of the development of bone, with a good woodcut, no word is said of the growth of bone, of the distinction between epiphysis and diaphysis, of the conclusions to be drawn from the insertion of pegs into these parts, and of the effects of feeding animals with madder. An account of the periods of eruption of the teeth, which is of considerable practical value, might have been given.

A curious error has slipped into the account of the relative sizes of the red corpuscles of different animals, that of man being given at $\frac{1}{12}$th of an *inch*—which, we presume, means of a millimetre—and the same mistake occurs with the other mammals. Dr. Yeo gives a classification of the nitrogenous bodies which form part of the system. The first group includes complex bodies forming the active portions of all tissues, such as protoplasm; the second group includes bodies which enter into the constitution of the first group—viz., albumen, serum-albumen; the third group includes bodies the outcome of differentiation, manufactured in the tissues—the albuminoids, such as gelatin; the last group are the intermediate, bye, or effete products of tissue manufacture, as lecithin and urea. We should rather take exception to the third of the above groups, or at least to the example given—gelatin. Is gelatin a constituent of the body?

The mode in which Dr. Yeo deals with disputed points has in every instance we have met with been remarkably sensible and straightforward. Taking, for example, the cause of the first sound of the heart, in regard to which so much difference of opinion exists, he observes that possibly there are several factors in its production, and he proceeds to give the principal events that are occurring at the moment of its production—viz., the heart's impulse, the contraction of the heart muscle, the rush of blood into the arteries, and the sudden tension of the ventricular chambers and of the auriculo-ventricular valves. That the heart's impulse is not the cause of the first sound is rendered evident by the fact that it can be readily heard when the chest wall is removed. Then again, although the sound resembles the tetanic contraction of the skeletal muscles, and although it corresponds in time to the contraction of the cardiac muscle and varies in loudness with the strength of that muscle, and may still be heard when the heart is empty, yet there is the great impediment to the reception of this view that the cardiac contraction is not a series of vibrations by which a sound is invariably produced, but a single contraction, and is therefore incompetent to produce a sound. Finally, Dr. Yeo points out that the closure of the auriculo-ventricular valves is synchronous with the beginning of the sound, and that lesions of these valves weaken or modify the first sound. Yet the tension of the valves would not account for presystolic sounds, and the first sound can be heard in an empty heart removed from the animal, in which the valves could not become tense. Analysis of the sound by suitable resonators has demonstrated the existence of two distinct tones: one high and short, corresponding to the closure of the valves; the other long and low, corresponding in duration with the muscle contraction. "So that, after all, it would appear that both the tension of the valves and the muscle tone have something to do with the production of the sound." Dr. Yeo entertains no doubt that the second sound is due to the sudden tension of the semilunar valves. The best chapters are those which treat of the urinary secretion and of nerve and muscle. These are particularly well worked up, and give most of the results of recent research. Upon the whole, although we have taken exception to one or two points, we consider Dr. Yeo's book to be a very good one. It is trustworthy, and clearly and intelligently written.

We cannot conclude our notice of this work without referring to the excellence of the woodcuts. These are not only very numerous and generally well executed, but to a large extent novel. Many are taken from Cadiat's recent work, and as a rule the source is acknowledged.

OUR LIBRARY TABLE.

Some Practical Observations on Vaccination (and Revaccination). By W. H. WHITEWAY WILKINSON, L.R.C.P.Ed., &c., one of the Public Vaccinators for the Parish of St. Mary, Islington. London: J. and A. Churchill.—At a time like the present all observations of experienced vaccinators have their value; therefore Mr. Wilkinson's book is opportune. He is sometimes crude in his theories—as where he traces post-vaccinal erysipelas to stomach derangements, &c. There is room, too, for much more literary care and accuracy in statement, and out of his large mass of cases—20,000 vaccinations—he might have given a larger number of precise data than he does, but after all these qualifications have been made the little book will be found useful to those interested practically in vaccination. Mr. Wilkinson recommends, as most authorities do now, revaccination to be practised earlier than puberty—about the time of the second dentition. He very properly insists on care being taken to shield vaccine vesicles from harm. Half the soreness attending vaccinations and revaccinations comes from neglecting this precaution. For inflamed arms he recommends cold water, or painting with a mixture of linseed oil, glycerine, and Goulard's extract.

What to do first in Accidents and Emergencies. A Manual explaining the Treatment of Surgical and other

Injuries in the absence of the Physician. By CHARLES W. DULLES, M.D., Fellow of the College of Physicians of Philadelphia, &c. Second edition, revised and enlarged with new illustrations. Philadelphia: P. Blakiston, Son, and Co. 1883.—This is much like other small manuals of the same description, and appears to possess no merits superior to some already familiar to us. We are alarmed to find that Dr. Dulles states that in the case of foreign bodies in the ear "very gentle efforts may even be made to remove" them "with a crotchet needle, or a bodkin, or an ear spoon," which to our thinking is an extraordinarily dangerous piece of advice to give to laymen. We also find that amateur surgeons are recommended to attempt to reduce dislocations of the shoulder by the heel in the axilla. These two faults in the book are alone sufficient to condemn it in the eyes of those who understand the perils of amateur surgery unless very carefully restricted.

An Index of Surgery. Being a Concise Classification of the Main Facts and Theories of Surgery, for the use of Senior Students and others. By C. B. KEETLEY, F.R.C.S., Senior Surgeon to the West London Hospital. Second Edition. London: Smith, Elder, and Co. 1884.—We sufficiently indicated the general character and scope of this work when the first edition appeared. The fact that another edition is so soon called for shows that it supplies a felt want. We have looked through the volume, and confess to being pleased with it. It is full of sound practical information, and will be very useful to *senior* students.

The Anatomy of the Inguinal and Femoral Regions. By EDWARD L'E. LEDWICH, Lecturer on Anatomy in the Ledwich School of Medicine, Dublin. Dublin: Fannin and Co. 1884.—The descriptive and surgical anatomy of the parts in relation with hernia is so important as to fully justify the appearance of a small monograph dealing with these regions, and we can strongly recommend Mr. Ledwich's work. The descriptions are very clear and accurate, and the illustrations are well chosen and most carefully done. We have great pleasure in advising its careful perusal by the student and the surgeon, for we know no better guide to an adequate knowledge of the anatomy of the inguinal and femoral regions. The introductory chapter should be read by every beginner before he commences to dissect the parts described in this small volume.

Sanitary Principles, more especially as applied to India. By Surgeon S. J. THOMSON, Bengal Medical Service. Pp. 147. Calcutta: Brown and Co. 1883.—This is a laudable attempt on the part of an officer of the Indian Medical Service to diffuse knowledge on the subject of public health and the means necessary for its promotion, among the educated members of the Indian community. It is, in fact, an extension to India of the movement which has been going on for some time at home in the form of health lectures and sanitary handbooks. We are disposed to think that the work would have been improved by a judicious curtailment of the introductory chapter and the omission of the more technical portions of the chapters on air, water, and food, as they may have the effect of deterring many readers from studying the book. But even with this drawback the work contains much that ought to prove very useful in promoting sanitary reforms and improving the health and social condition of the natives. We trust the author's efforts may be thus rewarded, and that his example may be followed by many others who have the opportunity of diffusing sound knowledge on this important subject.

Hygienischer Fuhrer durch Berlin. Herausgegeben von Dr. PAUL BÖRNER. Berlin: Max Pasch. 1883.—Amongst the numerous works upon sanitation which may be considered as the literary gains of the recent Berlin Exhibition, few can show such painstaking labour as the compilation which Dr. Börner issues under the above title. To the author, also well-known as the editor of the *Deutsche Medizinische Wochenschrift*, Berlin owes a debt of gratitude for the production of the book. It is one which barely admits of critical analysis. Suffice it to say here that it deals in turn with the health statistics of Berlin, with the authorities who have the care of public health, with the management of streets and open spaces, the water-supply and drainage, the food-supply, schools, orphanages, workhouses, the hospitals, asylums, and prisons, and that it is illustrated by numerous plans and some excellent maps.

THE LATE MR. MIDDLETON AND THE INFLUENCE OF DAMP SOIL ON PHTHISIS.

To the Editor of THE LANCET.

SIR,—In Dr. Andrew's recent lectures on Phthisis occurs the following. Alluding to Dr. Buchanan's report for the year 1866, he states, "In this he establishes this fact, at that time an unexpected one, that the drying of the soil effected by sewerage works is generally followed by a great reduction in the mortality from phthisis." This fact was not by any means an unexpected one, for it had been previously discovered and given to the world by the late Mr. A. B. Middleton, of Salisbury. In a paper read at Bath, on September 16th, 1864, before the British Association for the Advancement of Science, entitled "The Benefits of Sanitary Reform as shown at Salisbury," he states: "There was one disease very fatal in Salisbury, as some figures will presently show—consumption. The causes may have been various, but I am inclined to think that humidity and nastiness of atmosphere produced by the canals and cesspools . . . . were mainly the causes." Again, "The evils then were wet subsoil, bad sewerage, bad water. The indications of treatment were to dry the subsoil." Again, "Since drainage a great change has taken place in the number of deaths from the allied tubercular diseases, phthisis, tabes mesenterica, and hydrocephalus, as the annexed table will show." (Here the table was given.) "This diminution in a class of diseases admitted to be intimately connected with dirty and moist atmosphere is remarkable." Again, "At Salisbury for the seven years, about one-tenth of the deaths have been from phthisis; for the last three years only one-thirteenth, and for the year 1863 only eleven deaths occurred from phthisis, or 1 in 818 of the population, the proportion for London having been 1 in 363, and for all England 1 in 374." At page 26, in assigning a cause for the diminished general mortality, he adds:—"The diminution of consumption certainly appears to be a demonstrated effect from an evident cause." The year following the publication of this paper Dr. Buchanan visited Salisbury as Government inspector, and the late Mr. Middleton then gave him a copy of it, and informed him of his theory as to the causation of phthisis. The Blue Book already alluded to appeared a year after this meeting, but from some unassigned cause Mr. Middleton's name is not mentioned in it. As these facts do not appear to be generally known, I ask you to insert this in your journal as due to the memory of one who was certainly amongst the foremost sanitarians of his day, and to whom Salisbury is indebted for her position amongst the healthiest of English towns.

I am, Sir, yours obediently,

FREDERICK STOCKWELL, M.D. Lond.

Bruton, Somerset, May 6th, 1884.

NORTH-WESTERN AND YORKSHIRE ASSOCIATIONS OF MEDICAL OFFICERS OF HEALTH.—A meeting of these Associations was held at Halifax on the 8th inst. Dr. Britton, who occupied the chair, read a paper on the Working of the Factory and Workshops Act (Retail Bakehouses), 1883, in rural and semi-rural districts; Dr. T. W. Hime gave an address on Poisoning by Coal Gas; Mr. Francis Vacher read a paper on the Dress of Women and Children; and Dr. G. A. Kenyon spoke on the subject of Water Analysis. An animated discussion followed the reading of each paper, and in the course of some remarks at the close of Mr. Vacher's paper Dr. Deville spoke of the ill-effects of tight-lacing, and stated that the abolition of stays would never detract from the form of women.

THE LANCET.

LONDON: SATURDAY, MAY 24, 1884.

IN his speech after the presentation of the degrees at the University, the Vice-Chancellor referred to the recent changes in the regulations for the M.B. degree, and expressed the opinion that these would not increase the difficulty of passing the examination, but would prove a large saving of time to both candidates and examiners. From this we fear that the authorities of the University do not quite appreciate the nature and importance of the objections that are held by the teachers in the medical schools, and which were put forward by us on the 5th ult. We do not for a moment contend that the Senate has increased the severity of the Preliminary Scientific Examination by merely substituting General Biology for separate examinations in Botany and Zoology, but that by insisting on this examination being passed before the commencement of medical studies, and therefore at least four years before a candidate can obtain the M.B. degree, an increase in the time, and consequently in the expense, will in many cases be necessarily entailed, unless the examination be held more frequently. If the ideal candidate who never fails at an examination be only considered, and the ideal education in which the subjects of the Preliminary Scientific course are thoroughly taught in every country town, and towards which Sir JAMES PAGET'S remarks pointed, were at all likely to be forthcoming, we would allow that the change was a good one; but this ideal is yet far distant, and legislation much in advance of present possibilities entails great hardship on individuals, and is a mistake. Advising students to pass their Scientific examination before entering on their medical studies was wise; compelling them to do so must prevent many excellent students from seeking the degrees of the University. To show the practical working of these regulations, let us take an instance. A pupil on leaving school passes the matriculation examination in January or July. What must he next do? He gives a year to his Preliminary Science, and to study these subjects he must have access to a physical, a chemical, and a biological laboratory, and be educated by special teachers in each of these subjects. Such a practical education—and this is the only valuable one—can only be obtained, as pointed out in a former number, at the medical schools and the few colleges of science that have been established in London and the larger provincial towns. When we consider the cost of fully equipped scientific laboratories, the scanty remuneration of science teachers, and the comparatively small number of science students, we do not think that there is any reasonable prospect of their being increased to any large extent at present. It is notorious that almost every scientific college is at present in sad want of funds not for extension only, but even for maintenance. The student therefore must, in most cases, leave home to enter on an expensive course of study. If he matriculated in January, he will not be prepared to pass in July, for the University recommends him to devote a year to these subjects. He must therefore wait until the next July, and has been compelled by the University regulations to give not twelve but eighteen months thereto, unless his parents have kept him away from his studies for the extra six months, in order to lessen the cost; and the parents of the undergraduates of the University of London are in most instances unable to expend a very large sum of money on the education of their children without curtailing their expenses in other directions. Now, suppose that the candidate be rejected—and this happens on an average in from 30 to 40 per cent., and by no means to those only who have endeavoured to conjoin the scientific studies with their regular medical work,—is it at all likely that he either can or will give another year to the same subjects, or in many cases to one subject only? Rejection at the Preliminary Scientific Examination, even in one subject, by preventing a student's entrance on his medical studies, will mean a monetary fine in most cases of from £120 to £150, and consequently necessitate his abandoning the University course. The new regulation, therefore, whether intentionally or not (and we fear that with some of the authorities it is more from knowledge than from ignorance), will effectually debar a student presenting himself a second time for this examination, and many parents will be deterred, by the possibility of rejection, from allowing their sons to enter on the necessary studies. Were there two examinations in the year, as we have frequently urged, and as has been pressed on the Senate by Convocation, candidates could then present themselves after twelve months' study, even if they matriculated in January, and a rejected candidate would not have to choose between the alternatives of twelve months' postponement of the studies proper to our profession, or the giving up the University course altogether. But two examinations a year, we are told, would entail too much work on science examiners and the University officials, and hence the just claims of the candidate are ignored. Is it any wonder, then, that students, even ambitious ones, choose other universities where greater facilities exist? The action of the Senate in regulating so arbitrarily the education of its medical graduates is the more striking and inconsistent when we consider that for degrees in arts, science, and laws, examination only is deemed quite sufficient, and systematic education is altogether ignored.

OUR contemporary, *Blackwood*, has again come to the defence of the existing medical institutions. The writer seems to think that the medical journals are engaged in a conspiracy to misrepresent the profession and to ruin the great professional corporations, to which he traces all the medical progress of the last three centuries. With the corporations all the *genius* which is inseparably linked with them will vanish—not only the SYDENHAMS, the JENNERS, and the BRIGHTS, but "the living JENNERS, the GULLS, the CLIFFORD ALLBUTTS, and the HUGHLINGS JACKSONS." What monsters we must be! The sooner the deposition of THE LANCET and its medical contemporaries is accomplished, and a substitute is established, the better. It is evident from the writer's indictment that the time is "ripe, and more than ripe," for more faithful medical exponents—for such as can perceive the subtle connexion between corporations and genius. We might request that a number of memorials be initiated in favour of the writer's view of things, and ask

that the columns of *Blackwood* may be thrown open to all the crotchets of impracticable men, who are always ready with petty objections to great reforms. But this would be too practical a proposal, and would too cruelly demolish our contemporary's happy conceit that it represents the medical profession in trying to prejudice its readers against reforms the need of which has been apparent for a whole generation.

Briefly, our contemporary's case is this. The services of the existing corporations to medical science, and their sympathies with the profession, are such as to refute those who would deprive them of their privileges. We know that the existing examinations involve the rejection of an average of 33½ per cent., and we know what the present licentiates *are* guaranteed by the corporations; but as for those who are to be licensed by the new board, and who will have no *alma mater*, no motherly or grandmotherly body to look after them as they are so kindly looked after now—Heaven pity them! But these bodies, the writer admits, do require a little gentle pressure to compel them to rectify the one fault he finds in their public conduct: they will not *unite*—that is, the English colleges; for, like other hard-hearted reformers, he is prepared to leave the Apothecaries' Society out in the cold. He admits it to be a grievance that the student in England should be compelled to go through two or three sets of examinations by as many medical corporations, acting separately, before he gets an ordinary complete qualification to practise. This "real grievance" merely requires the carrying out of a provision in the Act of 1858; failing that, Professor HUXLEY'S suggested clause enabling the Medical Council to refuse registration to all single diplomas will meet the difficulty. The Scotch corporations, of course, according to the writer in *Blackwood*, do not need this. They reject more than other boards, and they practise that happy conjunction the absence of which is the one blot elsewhere, and they are prepared even to stop the granting of single licences under the proposed schema. Our new medical reformer is ready for more sweeping measures with regard to the Medical Council. While he will scarcely admit a whisper of censure against the existing medical authorities, he seems to think that, as the predominant authority in the Council, they have hindered its efficiency. At any rate, he would have a Medical Council of eighteen, from which their representatives should be altogether excluded; the Council to consist equally of representatives of the Crown and of registered practitioners. This is a more severe punishment of the licensing bodies than even we ever suggested.

To these proposals the reply is extremely simple and unanswerable. We have no malice against the chief corporations of the profession, which, under the Government Bill, with some slight amendments in committee, will, we believe, continue to be very important bodies as respects the organisation and authority of the profession. That medical genius or medical science would die if these bodies were a little more adapted to the nineteenth century, or if a slight process of combination were enforced or encouraged, is, we think, simply absurd. The proposal to exclude them from all representation in the new Medical Council is too unpractical a suggestion to have our support, even if it were just and desirable, which in our opinion it is not. We are desirous of a representation of the bodies in groups, as distinguished from a separate one. Then comes the great panacea of our new Conservative-Radical reformer—the refusal to register single qualifications. It is strange how certain writers on this subject always contrive to forget half, and the principal half, of the existing evil—that is, the inequality of standard in the different divisions of the kingdom. How is the most exquisite conjoint scheme for Scotland likely to satisfy the English people that the *conjoint* examination is equal to a similar one in England and Ireland, and *vice versâ*? Of course, the writer in *Blackwood* ignores the evidence of this inequality, and the deep conviction in England and Ireland of its existence. He must continue to do so. It is generally accepted as a fact; and no mere conjunction of bodies can meet the scandal. The fallacy that a large proportion of rejections at examinations is a proof of their severity or their justice has been long since exploded. The alternative theory receives its *reductio ad absurdum* in figures which show that the most terrible corporation examination in the kingdom is that of the Faculty of Physicians and Surgeons of Glasgow, or, still worse, the conjoint examination of the Royal Colleges of Physicians and Surgeons of Edinburgh. It is well known here, at any rate, that some of the worst examinations have always shown the largest proportion of rejections.

We must ask our new reformer in what Parliament he proposes to introduce his Bill, and what Government he expects to support it. For ourselves, we are content with the sensible measure now before the Legislature, and which we confidently hope will be passed. It is worse than useless to broach unpractical measures of reform, and to represent the evil as a single one—viz., that of single qualifications; when it is a double one—(1) that of half qualifications, and (2) that of unequal standards and competitive boards.

ALTHOUGH the coarser changes occurring in ligatured vessels have been studied by many observers for many years, and are generally well known, it is only of late that it has been possible to observe the minute processes by which healing is attained. The study is almost wholly experimental, for with our improved methods of ligature and of wound treatment, and the greatly reduced mortality after injuries and operations, not to mention the substitution for the ligature of torsion and forcipressure in a large number of cases, clinical experience, even when very extensive, does not afford the material by which the changes can be traced step by step through all its stages. Dr. COLLINS WARREN of Boston has for some time past been carrying on a very careful series of observations on this point, and he has embodied his results in a preliminary report which he has laid before the Boston Society of Medical Sciences. At the outset a comparison is drawn between the healing of a ligatured or severed artery and the union of a broken long bone, the external and internal callus having their analogues in the lymph effused on the outside and within the vessel. The ligature itself quickly becomes surrounded by a mass of lymph or granulation tissue derived from the loose cellular tissues around the vessel wall; this, which Dr. WARREN calls the "external callus," extends for some distance up and down along the adventitia. Where the parts are severely injured on the application of the ligature this "external callus" is very abundant, but where one thread of the ligature is left long, and especially where the ligature is of an irritating character and

excites suppuration, it is very small in amount, or may be practically entirely lost in the suppuration. The round cells of the granulation tissue are found slowly and gradually to find their way into the outer coat of the vessel—not through the surface, but where the coat is disintegrated by the continuous pressure of the ligature. When once the thread has caused a breach in the tunica adventitia the round cells quickly pass in between its fibres, and even wander on into the "internal callus," and assist in the formation of the lymph, which fills up and occludes the lumen of the vessel.

The "internal callus" is formed by a growth of granulation tissue from the divided and exposed middle coat of the artery into the internal thrombus; this tissue at first spreads irregularly through the clot, and where it comes in contact with the arterial wall it forms a close connexion with it. In the intervals between the irregular growth the clot slowly disintegrates, and thus intercommunicating spaces are formed which open on the free surface into the lumen of the vessel. Blood finds its way into these spaces, and it is in this way that the "canalisation" of the thrombus is accomplished. As to the source of this granulation tissue, a point which has excited much inquiry, Dr. WARREN has satisfied himself that the endothelium of the vessel takes some share in the process, but only a minor one, and he is disposed to limit it to providing an endothelial lining to the new vessels, and a covering to the internal surface of the cicatrix in the vessel. Beneath the endothelial covering of the cicatrix in small and medium-sized vessels, a layer of muscular fibres is developed, exactly resembling those of the media of the vessel, while deeper down still the tissue is composed of firm interlacing fibres; thus the cicatrix closing the vessel is ultimately formed of a tissue resembling very closely in all its details the normal coats of the artery. As regards the growth of muscular fibres in the cicatricial tissue, Dr. WARREN has noted that quite early in the healing process round cells are seen sprouting out from the torn or exposed surfaces of the media; later on elongated spindle cells, like those of the muscular coat, are seen springing from this coat, and passing into the granulation tissue. As the "internal callus" becomes fully organised, the "external callus" shrinks, and ultimately, in about three months, becomes entirely absorbed, or is represented only by a cord of connective tissue joining the ends of the ligatured vessel. The final result, of course, differs with the material used for ligature—whether it is catgut that is absorbed, silk that is encapsuled in the "external callus," or hemp that is extruded after the constricted outer coat has been completely disintegrated. These observations are interesting, as showing how closely the final cicatrix resembles a normal arterial wall, and as indicating the value of the processes occurring around the end of the vessel—the formation of an "external callus"—while the processes by which the vessel is to be finally sealed are being elaborated. It is no fanciful analogy that Dr. WARREN draws between the healing of a ligatured artery and the union of a simple fracture.

WHATEVER may be the truth as regards the existence of school pressure or its effects, one thing must be admitted, that public attention to the matter has been very effectually raised. The questions in Parliament, the address of Mr. TEALE at the Social Science Congress, the criticism of Dr. CLIFFORD ALLBUTT and others very much in the same direction, the letter of Dr. WILLIAMSON of Ventnor, and others in our own columns, have brought the question prominently before the public, and made it very difficult for the most enthusiastic educationists to work the Elementary School system longer without reference to the physical capabilities of children or of teachers, especially pupil teachers. Nor is the discussion of the question limited to this country. We have before us one of the most interesting papers we have seen by Dr. ROBERT EDES, of Boston, on "High Pressure Education: its Effects." Dr. EDES shows that of many ways of breaking down and exhausting the nervous system teaching is one. Of nineteen patients in the Adams Nervine Asylum, nine had been teachers. Of ten of these patients, whose cases may be fairly named "nervous exhaustion," seven had been teachers. In several of Dr. EDES' cases it is evident that the patients had been delicate from early life, and in others that health had been impaired by attacks of fever or by extra work; but making allowance for these qualifications, it remains apparent that the work of teaching is very trying to some natures. And —*pace* those who maintain the mental and moral equality of the sexes—he does not flinch from suggesting that women are not so capable of bearing the work as men. "We must suppose," he says, "for the earlier cases at least, either a relatively less power of resistance in the female, or a very different way of attacking the task." He thinks the girl teacher is urged by some strange impelling force to excel in teaching, as one of the few callings on which, in comparison with youths, she can rely. His great recommendations are that education should be really "e-ducation—a drawing out and developing, and not a cramming in"; that the capacity of the "knowledge-box" should be considered; that moderate and carefully regulated bodily exercise should be taken; lesser demands on teachers; fewer scholars; and the opening up of other employments which shall be considered respectable for women.

Two of the best results at home of the discussion of the question of school pressure are two reports on the subject, promoted respectively by the School Board of Birmingham and that of Leeds. We would recommend these reports to the attention of medical men and of all others who are interested in the sanitary bearings of school work, especially of the work in elementary schools. The report of the Leeds School Board is a very elaborate one, of which it is difficult to give an accurate idea. It deals boldly with the charges of over-strain or over-pressure in public elementary schools in Leeds, affecting both scholars and teachers. It gives a somewhat decided denial to the charges against the Board that the percentage system is used injuriously; that the measures of the Board lead to injudicious forcing; that they had insisted that the teachers must get a large percentage out of the children by pressure; that they had gone to a schoolmistress and said that they must have the percentage increased. "In every particular," says the Leeds Committee, "these statements are opposed to the facts." As regards the reports of individual cases, it is impossible for us to criticise them. They show, like many of the cases which have been published, how difficult it is to define exactly the cause of illness

in a child, and how easy it is to blame school pressure, when an attack of measles, or a fright, or a fever, or a diathesis is really to blame. We are at the same time far from doubting that school work in poor children is often a veritable cause of illness. This is still more probably true of the work of pupil teachers, although the Leeds report states that, with one exception, this inquiry has practically not produced a single instance of injury to health from over-pressure during the last five years amongst an average of from 700 to 800 pupil teachers and candidates employed. The Leeds School Board defends the system of pupil teachers, for the abolition of which there is very much to be said. One very important step taken by the Board has our full approval—the appointment of a medical officer of the Board for the examination of candidates for pupil teachership, and, we trust, for other medical purposes of advice and counsel. This example should be followed by all School Boards.

The Birmingham Report relates chiefly to the scholars in the schools under the Birmingham Board, and finds that the general system of education established under the New Code, and as administered by the Birmingham Board, cannot be charged with making over-pressure inevitable. The report is admirable as insisting on—what obtains in Birmingham—an efficient staff of competent teachers and more consideration for delicate and dull children. Our own endeavours have always been directed to securing careful reports of facts and of cases. These reports of two principal provincial boards, though perhaps proving too much in favour of the system and its administration, show that school authorities are alive to public and professional criticism, and are taking steps to diminish the just fears of many friends of education in its sanitary bearings.

Annotations.

"Ne quid nimis."

THE ROYAL COLLEGE OF SURGEONS AND REFORM.

THE Fellows of the Royal College of Surgeons of England are soon to have an opportunity of showing what is the extent of their interest in the College, and in those proceedings that are by many believed to be conducive to the welfare of the corporation as a centre of professional thought, influence, and power. It has been sufficiently demonstrated that the Council is not likely *proprio motu* to take the initiative step towards adapting the constitution and relations of the College to the conditions and requirements of the time. Indeed, it is clear that if the Council be not averse to every alteration whatever, its notion of what is required is different from that of the Fellows and Members. We have already announced that at its last meeting the Council decided not to take any action to give effect to the recommendations agreed upon at the general meeting of Fellows and Members, held in March last. From a letter published in another column it will be seen that Mr. Paul Swain, the mover of the principal recommendations carried at the late meeting, is about to take steps to ascertain the opinion of the Fellows. It is the duty of every Fellow to pay proper heed to Mr. Swain's communication. Let it be clearly and definitively settled whether the Fellows are content to allow matters to drift, or whether they are generally and seriously in earnest in their desire for those changes which will give the Fellows and Members a larger share in the management of the College. At present everything is decided by the vote of a majority of the Council. Those who approve Mr. Swain's object should furnish something more than moral support.

CHAIR OF PATHOLOGY AT CAMBRIDGE.

As the election to the important Professorship of Pathology in the University of Cambridge draws near, the interest in the ultimate issue increases. The contest lies not more between the various candidates than between principles, and the question really to be decided is—Shall this important professorship, with its magnificent endowment, be set aside for the purposes of chiefly physiological and biological research, or shall it be applied to the benefit of the medical school by the teaching of morbid anatomy and general pathology? Should the idea of making Cambridge a medical school still exist, there can be little doubt as to the course the electors will pursue, and their choice will fall on one of those candidates whose medical qualifications and antecedents point him out as most competent to teach pathology on the lines best fitted for the medical student. If, on the other hand, they think the interests of the University will be best secured by the professor devoting himself to physiological research, the lot will fall on one whose studies have been chiefly in that direction. In London there can be little doubt which way the wishes of the Cambridge medical graduates incline, and several have expressed decidedly their conviction that the election ought to fall on a gentleman who has already taught in the University, but above all has distinguished himself as a practical pathologist, and also as an original thinker. Another chair devoted to experimental physiological research would be doubling opportunities that already exist, and what they urge as chiefly wanted is solid teaching of histology and morbid anatomy, and whatever else belongs to pathology properly so called, so that the students may come up to London thoroughly well grounded in the rudiments and essentials of that science. We have no hesitation in saying that, whilst the improved scientific teaching of physiology in the University has increased its repute, it is to the practical teaching of Paget, Humphry, Latham, and Bradbury that the medical school of Cambridge owes its present position, and we feel assured that the sound teaching of a purely medical pathology will be of the highest possible value to Cambridge as a medical school, if it is thought desirable to maintain it as such.

THE JEWISH BOARD OF GUARDIANS AND "THE LANCET" REPORT.

THE Jewish Board of Guardians and the Mansion House Council on the Dwellings of the Poor have taken up with commendable promptitude and energy the question which we raised in our special report on the Polish colony of Jew tailors. The Jewish Board of Guardians at once convoked a special conference to discuss the matter; and at the suggestion of this conference they have adopted the following resolutions:—

"That the attention of the members of the visiting committee of the board should be called to those parts of the article in THE LANCET which treat of the overcrowding of the poor and the sanitary condition of their dwellings, with a request that every case of the kind that may come to their knowledge shall be at once reported to the board.

"That an inspector should be appointed for the remainder of the year, as was done in 1866 and in 1872, to search for, to report on, and to seek to remedy, cases of imperfect ventilation, improper drainage, defective water-supply, dirty conditions, and overcrowding at both the homes and workshops of the Jewish poor.

"That a sanitary committee should be appointed to

generally supervise and control the duties of the inspector, with power to take all reasonable remedial measures that they may think fit.

"That the remedy for cases of 'sweating' mentioned in the article in THE LANCET is not within the province of the board to deal with, nor could the economic question of wages and the hours of labour advantageously be considered by such a body as the board in its corporate capacity."

In the course of the discussion which took place, before the adoption of these resolutions, we are pleased to note that Mr. Mocatta defended our commissioner against the accusation of having written in an anti-Jewish spirit. It has been our object to observe the utmost impartiality while doing all in our power to improve the health of the poor and industrial sections of the population. But where the difference of race, religion, and nationality gives rise to habits that have a direct bearing upon sanitation, we are compelled to take notice of such facts. With regard to the Polish Jews, these peculiarities are in one respect injurious, and in another beneficial. Their unwillingness or inability to avail themselves of the English system of drainage occasions considerable nuisance; but this is a complaint we made with equal energy when describing the Italian colony in London. On the other hand, the Jews, by their sobriety and the great care they display to avoid unwholesome food, have contributed largely to preserve the vitality and health of the race. But these good results do not outweigh the evils of bad sanitation and overwork. The Jewish Board of Guardians are therefore to be congratulated on taking action in the matter, and, if their special inspector can be as successful in this instance as he was during the cholera epidemic, good results will ensue. We cannot, however, understand why the Jewish Board of Guardians should consider themselves at liberty to assist in carrying out the Sanitary Act while they hesitate to enforce the Factory Act. We maintain that the application of the latter law would destroy some of the worst features of the "sweating" system, and greatly assist in preserving the health of the workpeople. Indirectly it would further tend to raise the rate of wages, and this would also be a source of health as well as of happiness to thousands of industrious poor.

THE HOSPITALS ASSOCIATION.

ON Wednesday last, at the third general meeting of this Association, Mr. H. C. Burdett read a paper entitled "How can the Hospital Sunday and Hospital Saturday Funds be made more Useful to the Hospitals?" After narrating the outlines of the rise and progress of Hospital Sunday in the provinces, Mr. Burdett said: Dr. Wakley, the Editor of THE LANCET, by repeatedly urging upon the Lord Mayor and the London clergy the duty of organising a Metropolitan Hospital Sunday Fund, originated the movement in London, and to him more than to anyone else is due the credit of having introduced Hospital Sunday to this metropolis. In recent years THE LANCET has rendered yeoman's service to that cause by devoting much space to reports of the sermons preached and the collections made on Hospital Sunday. These facts were recognised by *The Times* some two years ago, and Dr. Wakley was correctly described in its columns as the founder of Hospital Sunday in the metropolis. It was not so easy, remarked Mr. Burdett, to trace the origin of Hospital Saturday, which was largely an outcome of the Hospital Sunday movement. The next point considered was what Hospital Saturday and Hospital Sunday had done for the medical charities of this country. Coming to the main subject, he thought it was desirable: First, that the Hospital Sunday and Hospital Saturday movements in each town should be under the control and management of the same committee or organisation. Each Council should endeavour to make every grant to each charity conditional upon the books of that charity being kept upon a method which has been laid down by the organisations, with the object of securing uniformity of account-keeping in all institutions which receive money from these organisations. Secondly, that no grant should be made to any institution, in any year, unless and until a representative, or representatives, of the Council have inspected the buildings and premises, and reported upon the management. Thirdly, that the aim of the Council of each organisation should be to present as large a free gift as possible to the hospitals. In no case should the tickets or recommendations received from hospitals by these funds exceed half the number which may be claimed by annual subscribers, whose contributions in the aggregate would represent a sum equal to the award made out of the Hospital Saturday or Sunday Fund to the respective hospital or dispensary. Fourthly, that the Hospital Sunday Fund organisation should accept the responsibility to distribute in right proportion the legacies of those members of the community who have no knowledge of hospitals, but who desire to benefit the best managed of these institutions by will. Fifthly, that a scheme should be prepared and developed by each Hospital Sunday Fund Council, by which it is possible for the hospitals to secure for the patients who are treated within their walls every kind of surgical appliance without delay or difficulty to the patients. And lastly, that these organisations should set an example to the managers of all charities by reducing the cost of collection to the lowest possible minimum.

COMPULSORY NOTIFICATION AT LEICESTER.

FOUR years have now elapsed since compulsory notification of infectious diseases came into operation in Leicester, and Dr. Johnston makes special reference to it in his recent annual report. At the time that the Local Act passed through Parliament it met with considerable opposition from some members of the medical profession, on the ground that the fact of a medical practitioner being compelled to notify the existence of infectious disease among his patients would amount, amongst other things, to a breach of confidence. Evidently referring to this, Dr. Johnston points out that the medical profession now fully co-operate with the Health Committee in this matter; that the duty of notification has been efficiently performed, and this with the least degree of hardship either to the medical men or the general public, and that no single instance has come to his knowledge where notification has in any way disturbed the previously existing relation between a medical man and his patient. This may of course be a one-sided view of the case, but the record is certainly worth noting. The total number of infectious cases notified in the four years 1880-83 have been 6112. In the second of the four years—namely, 1881, when the notification may be regarded as having come into full operation—the number of cases reported amounted to 1892; in 1882 they fell to 1397; and in 1883 there was a further fall to 1241. This at first sight might appear to indicate a falling off in the regularity of notifying; but this is probably not the case, since the diminution in the number of reported cases has corresponded with a diminution in the rate of mortality from the principal zymotic diseases. Thus, in 1881 that rate was 4·4 per 1000, in 1882 it fell to 3·2, and last year it only amounted to 2·5. As to the advantages which have accrued to the public from the system of notification, there can be but little doubt. As the result of it, the sanitary inspectors are able to cleanse houses, to secure better isolation of the sick, whether in hospital or in their own dwellings, to warn school authorities not to admit children from infected houses until they receive a certificate declaring them to be free from infection, to secure disinfection of infected articles, and to prevent the spread of infection by means of articles of food. Thus, owners of milk-shops having scarlet fever in their houses are now given the alternative of either immediately stopping their sale of milk, or of sending the patients

to the borough hospital and having the house disinfected. As yet, however, only some 52 per cent. of the scarlet fever cases are treated in hospital, and the mortality from this disease shows no marked signs of declining. This same result has been observed in populous places elsewhere; and it is evident that, in view of the wide diffusion of the scarlet fever poison in our large towns, the measures needed for its eradication must be more drastic than any which it has as yet been found practicable to carry out. In the case of small-pox the matter is different. During each of the last four years that disease has found a footing in Leicester, fourteen different importations having taken place. Prompt removal to hospital has always followed on the notification of the disease, and hence a town having an undue proportion of its population unprotected against that disease has invariably escaped any material outbreak. Diphtheria does not appear to be received into the borough hospital, perhaps because of the want of special isolation wards. But much good has followed on the existence of that disease becoming known to the sanitary officers, for it has often been found to have been associated with serious defects of house-drainage, and these conditions which heretofore remained untouched are now always at once remedied. So far as the health authority and the public are concerned, the system of notification in Leicester would appear to have worked much good. As regards any other aspect of the question, the views of the medical officer of health might perhaps be regarded as not altogether free from bias.

THE LAST ILLNESS OF ROBERT BURNS.

A QUESTION has arisen as to the cause of the death of the poet Burns. In those days no accurate life histories of disease were written, or possibly even thought of. The data for diagnosis of the poet's last malady or of his constitutional type consist, therefore, merely of the statements, somewhat coloured, of his friends respecting his symptoms or the opinions of his medical advisers. Nevertheless, there is enough to justify the bringing forward a suggestion on a subject which is not without interest in connexion with the later advances of medical knowledge. Two points are prominent in the physical state of Robert Burns, as far as it has been recorded, and these are evident throughout his life—great development of muscular strength, and a sympathetic excitability of unusual acuteness. Proofs of this latter state appeared as early as the age of thirteen in a tendency to melancholy, associated with dull headache. Before thirty was reached palpitation with threatened attacks of syncope had become common. It is to be noted that this symptom showed itself after a period of celebrity and luxurious dissipation in Edinburgh. At thirty-five we find him complaining to a friend that he "suffers for the follies of youth," and that "flying gout" has attacked him, also that he has been seized with an "accidental complaint," but he still appears to have passed for a vigorous man. Here we trace the entrance of another element or elements of disease unobserved until then. A year later, after a deep potation, he was chilled, suffered from fever with rheumatic joint symptoms, followed by emaciation, muscular tremors, and death in seven months. In this recital, then, we find first a strongly neurotic basis for the action of disease, a nervous system very active, overwrought, and, we may suppose, at times over-nourished within the verge of morbid congestion. Serious disease need not have followed from this alone in a constitution so elastic; but on this system, so tried, is cast the burden of continued dissipation, and subsequently that of actual acute disease. Is it remarkable that it should have proved unequal to the triple strain? All are aware how badly the neurotic type resists the effects of convivial indulgence. The professional mind will recognise, moreover, the readiness with which structures over-taxed by exercise become the selected seats of inflammation. We cannot forget these facts in estimating the meaning of "flying gout" and "rheumatism" as applied to the illness of Burns. While, therefore, it is impossible to gauge exactly the causal influence of gout, rheumatism, or "the follies of youth," the final and only grave illness of the poet presents to our mind a history and features further indicative of inflammatory mischief in the spinal cord.

THE RETURN OF THE GERMAN CHOLERA COMMISSION.

THE German Government have not been slow in marking with their approbation the scientific labours of Dr. Koch and his colleagues upon the cholera. The awards bestowed by the Emperor, and the substantial grant of money voted by the German Parliament on the motion of the Minister von Boetticher, may well be contrasted with the like honours which States are wont to confer upon victorious generals. In this respect Germany, which is not unmindful of military glory, has set a worthy example to other nations. May we not learn a lesson from this too, and trust that the day is not far distant when the claims of science, and especially that branch of science which aims at the investigation of disease, will receive adequate recognition from the State? How long are we to wait before we have in London an institution comparable with the Gesundheitsamt of Berlin? The country which produced Parkes should not be contented to allow the scientific pursuit of hygiene, which is for the common good, to be carried on without the resources which the State alone can furnish. The hearty reception awarded to Drs. Koch, Fischer, and Gaffkey, by their professional brethren, as described in the letter from our Berlin correspondent, must have been to them not the least gratifying of the results of their labours. In adding our congratulations, we may trust that the anticipations of further success in the battle against cholera raised by Dr. Koch may be verified.

THE "MYSTERIOUS DEATH" AT ILFRACOMBE.

ON April 1st, Mr. H. F. Bromham, coroner, opened an inquest at the Ilfracombe Hotel, touching the death of a gentleman named Shipway, aged seventy years, who died on March 28th under somewhat unusual circumstances. The deceased, who lived at Roslyn Hoe, Torrs Park, was a retired London tradesman. His habits were active, and he was very abstemious. He appeared to be in the enjoyment of fair health until March 7th, when he complained of cramp in his legs; this, however, after lasting for a few days, passed away. On March 21st, Mr. H. R. Foquett was summoned to attend the deceased, whom he found suffering from diarrhœa and sickness and abdominal pains. Under appropriate treatment the patient rallied so much that he was able to sit up. On March 24th, two days later the gastro-intestinal symptoms returned with increased violence, and death took place from exhaustion on March 28th It may be remarked that the deceased told Mr. Foquett "he had taken some gruel, and it went down like poison." The problematical nature of the case led Mr. Foquett to ask permission to make a post-mortem examination, which was granted. The investigation was conducted at the residence of the deceased. Dr. Cornelius B. Fox—who, by the way, had met Mr. Foquett in consultation and fully endorsed his views—was present. These gentlemen found the stomach distended with gas and partly filled with some dark liquid, but of food there was little or none. The small intestine contained a quantity of "dark bloody fluid." The other organs presented no marked signs of disease. The report before us makes no mention of the state of the urine. Still in doubt as to the cause of death, Mr. Foquett communicated with the coroner, who ordered an inquest and an

analysis of the contents of the stomach and intestines, the solid viscera, and several articles found at the house of the deceased, among them some lozenges. The whole were properly preserved, sealed, and delivered to Dr. Stevenson. At the adjourned inquest on April 15th Dr. Stevenson gave evidence. He stated as the results of his investigation that the stomach and intestines showed nothing abnormal except the blood in the intestines, and as to this he could offer no opinion as to its exact source—whether it had been effused during life or had escaped whilst the the post-mortem examination was being held. "Traces of antimony were found in the liver and kidneys too small to admit of accurate estimation as to quantity." No poison was detected in the stomach and intestines. Each of the lozenges above referred to contained morphia equal to ·007 grain and antimony equal to ·03 grain of tartar emetic. The deceased was known to have been in the habit of taking the lozenges, which were used to allay cough. Dr. Stevenson came to the conclusion that death arose from natural causes, as he did not consider the small amount of antimony in the liver and kidneys sufficient to account for the symptoms observed during the lifetime of the deceased. The proximate cause of death there seems little reason to doubt was asthenia from continued vomiting, diarrhœa, and pain, but what led to the gastro-intestinal disturbance remains unexplained. We hesitate in expressing an opinion in the least degree at variance with the testimony of so skilled an expert as Dr. Stevenson; at the same time, we feel compelled to say that to our minds it is not proven that the antimony had nothing to do with the causation of the symptoms, and of the death. The quantity found on analysis is not a certain guide as to the amount that has been taken. Again, it is quite possible that death may ensue and yet not a trace of poison be detected in the stomach. Then, too, there is the possibility of a cumulative poison suddenly acting with great potency, possibly by an increased receptivity on the part of the nervous system. It does not follow because the signs of irritation of the stomach and intestines are absent that therefore death is not due to the remote effects of an irritant poison. We have no grounds for casting the slightest imputation on anyone, but, nevertheless, we are of opinion that Mr. Foquett was not only justified in every step he took, but that the neglect of any one of them would have amounted to dereliction of duty on his part. We congratulate him on the straightforward way in which he grappled with the difficulties of the case.

ATMOSPHERIC HUMIDITY AND THE SPREAD OF SMALL-POX.

IN an essay recently written by Dr. F. W. East, on the subject of Hygrometricity and the Spread of Specific Contagia, and to which the gold medal of the University of Durham has been awarded, the author deals specially with the influence of the Homerton Small-pox Hospital on the surrounding neighbourhood; and the investigations which he has made have led him to conclude that that institution has caused an incidence of small-pox round it by some other means than the ordinarily recognised vehicles of communication, such as by visitors, nurses and other attendants, clothing, ambulances, &c. On the occurrence of certain groups of cases within a quarter of a mile of the hospital during the epidemic of 1881, Dr. East visited a number of cases, and although the most careful inquiries were instituted as to the possible modes by which the disease might have been contracted, none were discovered, and he was compelled to arrive at the conclusion that the poison of the disease had passed from the hospital to the individuals affected through the air. Inquiring further as to whether there had been any particular condition of the atmosphere during the few weeks preceding the attacks referred to, he was struck by noticing the extremely humid condition of the air that had prevailed, the hygrometric state of the atmosphere as measured by the wet and dry bulbs having averaged eighty-nine degrees. These occurrences had followed on a thaw and fog ensuing upon a heavy fall of snow. There had also been an absence of any prevailing wind at the time. Following out this idea, Dr. East, in his thesis, gives a number of examples drawn from nature and scientific experiment to show that, as aqueous vapour approaches its point of atmospheric saturation, it exerts an adhesive power over minute particulate matter which may be in immediate contiguity with it, and he considers that aqueous vapour must be looked upon as one factor aiding the dissemination of particulate matter, including disease germs. Three points he notes in connexion with this: First, the ascensional force of aqueous vapour; secondly, the universal presence of aqueous vapour in the atmosphere; and thirdly, the close affinity existing between water and minute particulate matter. Reverting to the condition of things about Homerton Small-pox Hospital, he considers that the hygrometric condition of the atmosphere, coupled with the exceptional stillness of the air, must have extended for some distance around the hospital, that particulate germs would in consequence tend to hang about the spot where they were given off, and that they would be placed under circumstances specially favourable to the retention of their vitality. It will be remembered that Mr. Power, in his report on the outbreak which occurred around the Fulham Hospital in January and February, 1881, drew attention to much the same circumstances. Thus he specially pointed to the rapid fall of the barometer on January 11th; to the severe frost, characterised by still, sometimes foggy, weather, with occasional light airs, &c.; and he particularly adverted to the fact that just preceding the special outburst, which took place in the fortnight ending Feb. 5th, there existed in the neighbourhood of the hospital opportunities of a remarkable kind for the "quiet dissemination of matters contained in the air, and for the deposit perhaps of any that were particulate." The influence of a humid state of the atmosphere in favouring the spread of the several contagia is a matter which is attracting attention at the present moment, and some observers are inclined to believe that such an infection as that of enteric fever is never conveyed aerially unless in an atmosphere which is highly charged with aqueous vapour. Dr. East's essay is an interesting contribution to the subject, and it appears opportunely in so far as the considerations involved relate to the influence of Homerton Hospital, a matter concerning which Dr. Tripe's promised report is being awaited.

SALICYLIC ACID IN FRENCH WINE.

WE have received an official protest from the Chambre Syndicale du Commerce des Vins de l'Arrondissement de Bordeaux, stating that they have never taken legal measures to defend the right of using salicylic acid for the preservation of the wines of Bordeaux. Nor has this Syndicate addressed any petition on this subject to the French Chambers, for they recognise their incompetence to judge the merits of the question. The Bordeaux Syndicate only intervened to urge that the Government should act with the greatest severity in respect to foreign wines which are in any way adulterated and are not composed solely of the juice of fresh grapes. Such a protest emanating from so influential a body is welcome reading to all who appreciate the virtues of good claret. Unfortunately it does not go very far. It is notorious that a large proportion of the wine consumed in France is preserved with the assistance of salicylic acid; and that wine merchants, both in their individual capacity and collectively as members of syndical chambers—there are

more than 600 syndical chambers or trade societies in France—have sought in the law courts and in the Legislative Chambers to obtain legal sanction for this practice. Since the publication of the note on this subject in these columns, we have heard that Professor Brouardel has found even more than a gramme of salicylic acid in a litre of wine; a gramme and a half, and, on one occasion, nearly two grammes were detected. Under these circumstances, we repeat, that the decision of the Final Court of Appeal, rendering it a penal offence to use even the smallest quantity of this antiseptic, was the only effective means of dealing with this grievance. We are glad to note, further, that the French commissioners at our Health Exhibition have refused to allow an eminent firm to display in the French section the salicylic acid they have been in the habit of selling to wine dealers. This action is thoroughly in keeping with the spirit of the French law and with the object and aims of our Health Exhibition.

THE SUPPLY OF GAS IN CHELSEA.

THE inhabitants of Chelsea and the surrounding districts seem to have a very serious grievance in connexion with their supply of gas. On the 24th of June last an amalgamation was effected between the London Gas Company, by which the district had been previously supplied, and the Gas Light and Coke Company; and though the price of gas has not been raised, and the meters have been tested and found correct, the bills of consumers have, since the amalgamation, risen from 20 to 50 per cent., compared with those for the same quarters in previous years; and this increase has taken place in many instances in which it can be fully proved that a less number of burners have been used, and that gas has been burnt considerably fewer hours per day than in previous months. The explanation is, however, very simple. The gas has been forced through the mains at very much increased pressure since the Gas Light and Coke Company obtained control of the supply, and the consequence is that a large quantity of gas is registered as passing through the meters, and the dividends of the company are increased at the expense of the health and purses of the luckless consumers, to say nothing of the damage inflicted on books, pictures, furniture, &c., by such an excessive supply. We would counsel the inhabitants of Chelsea, if no mitigation of the evil is brought about, to discontinue the use of gas, and resort to the oil lamps and candles of their ancestors.

SMALL-POX IN CALCUTTA.

THE inhabitants of Calcutta appear to be very unfortunate in the municipal commissioners who are entrusted with the charge of the sanitary arrangements of their city. It is now upwards of a year and a half since one of the newspapers called attention to the disgraceful condition of the sewers and the complete absence of efficient sanitary supervision. In consequence of the exposure thus publicly made, the sanitary commissioners were compelled to adopt certain measures for the improvement of the "bustees" and of the sanitary condition of the sewers; but to what extent these have been carried out, and with what results, remains yet to be told. A fresh cause of complaint has just been brought forward in the neglect of the commissioners to provide any adequate accommodation for the isolation and treatment of Europeans and Eurasians who may be attacked with small-pox. It appears that this disease is now prevailing in Calcutta, and that the only place available for isolation is a small room in the Campbell Hospital at Sialda, which is described as having four patients in it, though the space is hardly enough to accommodate two, without a bath-room of any sort, and with scarcely any furniture. The beds are stated to be by no means clean, the bread bad, and the cookery generally dirty and tasteless. This very unsatisfactory state of things was brought to public notice in two articles in the *Englishman* newspaper. The attention of the Lieutenant-Governor, Mr. Rivers Thompson, was drawn to them, and he has referred the whole question to Surgeon-General Payne, to report upon the circumstances as they exist, and to suggest such remedies as he may consider advisable. His suggestions are not to be confined to the provision necessary for the European population alone, but are to include also that required for the natives. We have no doubt the question will be carefully investigated by Dr. Payne, and we have every confidence that the measures he may see fit to recommend will be of a thoroughly satisfactory character.

THE CENTENARY OF THE HARVARD MEDICAL SCHOOL.

LAST October the Centenary of the Harvard Medical School was celebrated, and at the same time a large and very well appointed new school building was dedicated and formally taken possession of by the school authorities. The event of chief interest in connexion with the ceremony was the delivery of an address by Dr. Oliver Wendell Holmes, the Emeritus Professor of Anatomy in the School. This, with the other speeches delivered on the occasion, has been published, and the volume is a worthy memento of the occasion. Dr. Holmes' address is marked by all the genial humour so familiar to the "Autocrat's" admirers. It consists in a brief review of the changes in the school during the past century, with short word paintings of its earliest professors, together with a justification of the scientific methods of study and of the demand for greatly increased facilities for teaching in the form of lecture-theatres, laboratories, and museums. We are glad to learn from the volume before us that the Harvard Medical School is in a very flourishing condition, and this in spite of its having to compete with institutions who graduate their students after a shorter course of study and without subjecting them to any preliminary examination. Harvard has always done its best to raise the standard of medical education in the United States; it has numbered among its professors many of the men most eminent in their departments of science in the New World, and is, perhaps, more vigorous to-day than ever before. Among the events of the Centenary were the presentation of a portrait of Dr. O. W. Holmes and a bust of Prof. H. J. Bigelow to the School. It was fitting that steps should be taken to perpetuate the memory of the connexion with the School of the Professor of Anatomy who has won such eminence in the field of poetry and literature, and the Surgeon who has left an impress on surgical art which no time will efface.

RABIES DEFEATED.

A FIRE many times kindled within the short space of some months is suggested by M. Pasteur's repeated researches on the pathology of rabies. On Monday last he read a new paper embodying the facts which he alleges he has discovered concerning canine madness. He has invited the Minister of Public Instruction to an experimental feast which must surely shock the refined tastes of the anti-vivisectionists. This experiment will deal with the lives and deaths of twenty dogs. Twenty animals are to be made proof against rabies by M. Pasteur's method, and twenty animals are to be in their natural state. These forty dogs will be bitten by mad ones, and it is hoped that a successful demonstration will be afforded of the immunity of those dogs inoculated by M. Pasteur with the preventive virus. In a Parisian journal it has been announced that any person bitten by a mad dog has but

to present himself at the Normal School laboratory and put himself under the treatment prescribed by M. Pasteur, in order to be made proof against rabies. M. Pasteur has found that the virus of rabies increases in virulence in its passage through a series of rabbits, whilst it becomes attenuated in intensity by transmission through monkeys. He is said to have taken the virus from the brain of a dog which had died of madness, and to have inoculated with this an ape, which afterwards succumbed. Then with the weakened virus of the dead ape he inoculated two living ones in succession until he obtained a virus which was sufficiently harmless. With this latter he inoculated four rabbits, one after the other, until the poison increased to a maximum of intensity. By these processes M. Pasteur is able to obtain virus of different degrees of strength. The specific virus has not yet been isolated so as to render it possible to ascertain its precise characters. M. Pasteur appears to be sanguine that hydrophobia will be banished from our midst.

RETIRING ROOMS IN LONDON.

THE LANCET has for many years past urged the humanity of providing public retiring rooms for women. The same kind of provision which is made for males ought to be made for females. The importance of the relief afforded is even greater in the case of the latter than in that of the former sex. We are glad to learn that the Commissioners of Sewers have recognised the wisdom of the policy we have long advocated. The *Pall Mall Gazette* deserves credit for the courage it has shown in treating this subject with the requisite degree of prominence. We do not hesitate to affirm that very great and grievous evils have resulted from the neglect to provide the conveniences required. It could not be otherwise; and no one who bestows a serious thought on the subject can fail to see that the omission has been a culpable oversight. Unfortunately, even now that the necessity has at last been perceived, the provision made is quite inadequate. To the railway companies belongs the greatest credit for carefulness in this matter, and we cannot but think that for what they have done they deserve the gratitude of the public.

REGISTRATION OF INFECTIOUS SICKNESS.

ALL earnest sanitarians fully recognise the value of trustworthy sickness statistics as storm-signals of infectious disease prevalence; and many times during the last twenty-five years have more or less practicable suggestions been made for the collection and publication of returns of registered sickness. One of the most valuable and suggestive experiments in this direction appears in the May number of the *Manchester Health Journal*. There are now thirty-eight towns in England and Scotland in which the notification of infectious disease is compulsory. In response to an invitation from this enterprising periodical, twenty-one of the thirty-eight medical officers of health for these towns filled up forms supplied for that purpose with figures showing the cases of infectious disease notified during the first quarter of this year in the various towns. The value of the tables compiled from these returns is special in its bearing upon the varying operation of notification in different towns, and general as regards the practicability of trustworthy records of infectious sickness. It may, in all earnestness, be hoped that a still larger proportion of the towns where notification is compulsory will be able to contribute to the return for the current quarter. The aggregate population of the twenty-one contributing towns is little short of two millions and a quarter, the largest town being Manchester and the smallest Stafford. The number of notified cases of disease in the same towns was 2935, including 2016 of scarlet fever, 605 of enteric fever, 236 of diphtheria, 51 of typhus, and 27 of small-pox. The deaths from these diseases in the twenty-one towns during the quarter were 464. Therefore, on the presumption that all the cases occurring were duly notified, the mortality was equal to 14 per cent. of the cases of attack. It is evident, however, that this rate of mortality is too high, and it must therefore be presumed that there is in many of the towns deficient notification. For instance, the apparent mortality of diphtheria is 35 and of enteric fever 18 per cent., both of which proportions exceed considerably those recorded in hospitals, in which an undue proportion of severe cases is received. The variations in the relative numbers of deaths and notified cases in different towns are naturally wide, no doubt in part due to varying types of the disease. For instance, in Derby 66 cases of scarlet fever were notified, and no death was registered; and in Edinburgh 518 cases, and only 34 deaths. While, on the other hand, in Blackburn the proportion was 67 cases to 16 deaths, and in Birkenhead 61 cases to 10 deaths. The information given in the tables will have increasing value when similar tables for subsequent quarters afford an increase of the bases of observation. We therefore hope to see this useful experiment repeated, and trust that it may be possible to add the figures for other towns.

THE PEERS ON PIGEON-SHOOTING.

THERE is, so far as we can judge, no difference of opinion—outside the pleasant combination formed by the Peers, the suburban publicans, and the lower class betting-men of the metropolis against the mature opinion of respectable people throughout the community—as to the discreditable action of the House of Lords in the matter of the Cruelty to Animals (Pigeon-shooting) Bill. The debate on Lord Wemyss's question was, if possible, more damaging to the reputation of the Upper House than that which took place when the measure was thrown out. It is all very well for the Earl of Redesdale to pose as a martyr because he has been rated a little uncivilly on the subject of his proceedings in the business; but, on reconsideration, we think his lordship must feel that he has erred not less in political prudence than in public policy.

A CORONER LIBELLED.

AN amusing action was tried in the Lord Chief Justice's Court on May 16th and 19th. Mr. Thomas Soars Johnson, surgeon, the coroner for the city of Canterbury, claimed damages for a libel alleged to have been published in the *Kentish Observer*. The proprietor of the journal pleaded that the libel was true in substance and in fact, that it was published for the good of the community, and without private or personal malice. It appears that Mr. Johnson, in the exercise of his judicial functions, held two inquests, one on the body of a woman who died shortly after childbirth, the other on that of her new-born infant. There seems little doubt that the deaths were accelerated by want of proper and sufficient sustenance. The husband of the deceased woman was an inmate of the workhouse, and she herself was requested to go in for her confinement, but refused. The relieving officer declined, as he was bound to do, to give her out-door assistance except on a certificate of "urgency." During the inquiry the coroner severely animadverted on the existing law, but at the same time clearly pointed out that no blame could be cast upon the relieving officer for the course he took. Setting aside points of minor importance, we come at once to the gravamen of the libel, which was that the coroner was guilty of unseemly levity, and that his inquests were a travesty on judicial procedure. It was given in evidence at the time that Mr. Johnson, whilst speaking to a witness (a cripple), said: "You ought to have gone with the Grand Old Man to Cannes"; and to a

reporter, "Here, don't you put that down. Dash it! no. Don't you take every word. If you do, you will have a rummy report"; and so on. A transcript of the shorthand writer's account of the inquest was sent to the Lord Chancellor, who saw no reason to interfere either by way of action or admonition. Though we do not for one moment subscribe to the witticisms of Mr. Johnson, nor suggest that they were in keeping with good taste, whatever may be thought of the justice of the verdict, we would fain hope that the public time and money may not be wasted in once more displaying in court the differences between plaintiff and defendant.

THE CITY CORONERSHIP.

THE vacancy in the City coronership is not yet advertised. A committee of the Common Council is still considering the qualifications and emoluments of the office. There are at least sixteen candidates, of whom six are medical men. A statement has appeared in a lay contemporary that the medical staff of Charing-cross Hospital has sent a letter to Mr. P. F. Langham, deputy coroner for the City, congratulating him on his appointment to the coronership of the Duchy of Lancaster, and wishing him equal success with regard to his candidature for the vacant office in the City. We are able to state that, whatever any individual member of the medical staff of Charing-cross Hospital may have done, the staff officially has not sent such a letter as that referred to, and indeed has no knowledge of it.

OPEN SPACES FOR NORTH LONDON.

NEXT only to the devising of means for lessening the noise of London traffic, as a public blessing, is the provision, and above all the retention, of open spaces where grass and trees can be recalled to the memory of those who dwell in courts and alleys. The Islington vestry has been laudably moved in this great matter by Mr. S. Price. This district is threatened with the loss of the only open space it can boast of, save Finsbury-park—viz., Highbury fields. The public spirit of landlords is not to be relied on when leases fall in. We trust that the efforts of the Islington vestry, with the co-operation of the Metropolitan Board of Works, will be successful in retaining this last and pleasant trace of "merrie Islington."

EXCISION OF THE PATELLA.

IN the account of his interesting case of excision of the patella for caries, with recovery with a movable joint, published in our columns on March 22nd, Mr. Dodd stated that he thought this was the earliest recorded instance of such a favourable result of this operation. The *Medical News* points out that in the *North American Medico-Chirurgical Review* of May, 1880, Dr. O. B. Knode records a case of necrosis of the patella for which he removed the whole of the bone, and a movable articulation was preserved.

STRETCHING THE SPINAL CORD.

PROFESSOR HEGAR has recently read a paper at Freiberg in which he advocates stretching the spinal cord. Our readers will be glad to hear that the operation does not consist in opening the spinal canal and directly stretching the spinal medulla. But Dr. Hegar has found that when the spine is very much bent the cord is actually lengthened. His mode of procedure is to place the patient on his back, and then, with the knees kept carefully straight, the lower limbs are bent up towards the chin as far as possible. In this way the great sciatic nerves are put on the stretch, and this as well as the over-bending of the spine stretches the lower end of the cord. The cases for which Dr. Hegar recommends this treatment are those of women who suffer from pelvic pain, and of nervous phenomena referable to the branches springing from the lumbar enlargement of the cord. Already the treatment has been employed in a few instances, and, it is stated, with success.

SMALL-POX AND VACCINATION IN BIRMINGHAM.

SMALL-POX still continues very prevalent in Birmingham. According to Dr. Alfred Hill's last quarterly report, 384 cases were reported up to March 31st of this year, and of this number 54 died. The cases admitted into the borough hospital were 362 in number, and the mortality amongst them was at the rate of 39·4 per cent. in the unvaccinated, and 7·4 per cent. in the vaccinated. The death-rate amongst the latter varied also with the degree to which vaccination was shown by existing marks to have been efficiently performed. Testing this matter roughly, and without reference to the actual size of each vaccination scar, it appears that of those who had only one cicatrix 14·9 per cent. died, where there were two cicatrices the rate was 13·3 per cent., the existence of three cicatrices reduced the mortality to 4·7 per cent., whilst amongst those patients who had four or more cicatrices there was no loss of life at all.

THE ABERDEEN UNIVERSITY CLUB, LONDON.

A NEW University Club has appeared in London, and if we may judge from its first dinner, held at the Holborn Restaurant on Wednesday evening, it is likely to prove a very prosperous one. The Aberdeen graduates and their friends on this occasion numbered about 160. They were ably presided over by his Grace the Duke of Richmond and Gordon, the Chancellor of the University. The guests included Lord Watson, Sir H. Maxwell, Sir Wm. Guyer Hunter, Sheriff Dove Wilson, Dr. Bain, Dr. Campbell, LL.D., Sir Wm. Mac Cormac, Dr. Matthews Duncan, and others. Too much credit cannot be given to the hon. secretaries, Mr. R. M. Routledge and Dr. Burnet, for the admirable arrangements of the evening, and generally for the start of the club.

THE LIBRARY AT THE HEALTH EXHIBITION.

GOOD progress is being made by the sub-committee appointed by the Executive Council of the International Health Exhibition to organise an international library and reading-room, for the reception of works on hygienic and educational subjects. About 3000 books have been received from various parts of the world, and a special effort is now being made to obtain local guide-books, pamphlets, medical treatises, and similar publications explanatory of the climatic, sanitary, and other characteristics of health resorts. It is intended in due time to publish a complete catalogue of all books received.

LETTING INFECTED HOUSES.

THE judgment pronounced by Mr. Justice Field in the action "Bird *v.* Lord Greville" must, on calm reflection, commend itself to every member of the profession. Measles, although popularly regarded as a trivial malady, too often leaves worse consequences in its train than most other affections of childhood. Lung disease in after years is among the commonest sequelæ; while if an adult take measles and there be the slightest inherited tendency to pulmonary mischief, the chances of active trouble setting in are very great indeed. It was, therefore, simply absurd to contend in this case that Lady Greville would have been justified in taking her family into a house where measles had been rife only a week previously. We are heartily glad that judgment was given for the defendant in this instance. The lesson taught by the judicial result cannot be too widely promulgated.

INFANTILE DIARRHŒA AT SCARBOROUGH.

IN his annual report for 1883 on the health of Scarborough, Dr. J. W. Taylor deals specially with the mortality from infantile diarrhœa, a disease which is occasionally somewhat severe in that town. Thus, in the third quarters of 1880 and 1882 the deaths from "diarrhœa and dysentery" numbered thirty and twenty-one respectively; 1883 being singularly free from the disease. During the past eight years the total diarrhœa deaths were 163; of these 131 took place in children under one year of age; and the greatest concentration both of cases and of deaths has taken place in two or three localities which are occupied by the poorest classes, and which are most thickly inhabited. After dealing with the circumstances which appear to influence the diarrhœa prevalence in Scarborough, and especially with such subjects as the unhealthy conditions and surroundings of dwellings, and the occasional prevalence of an abnormally high temperature and of excessive moisture, Dr. Taylor gives prominence to the question of the improper feeding of infants. With a view to cope with this evil it appears that a crèche was established in 1873, and that this institution is largely resorted to by mothers who are obliged to go out to work during the summer season. Children who are brought to this nursery suffering from diarrhœa as a rule rapidly recover, but it has been found that the return home for the interval from Saturday to Monday often brings on the affection again; the result being generally brought about by improper feeding on the Sunday. With the object of providing suitable information on this subject, 10,000 circulars giving directions as to the proper nursing and feeding of infants have been distributed at intervals. Some very excellent tables showing the relation of the death-rate both from diarrhœa and other diseases to temperature, rainfall, and to the general mortality are appended to the report.

THE DEATH OF MR. CHARLES SPENCER.

OUR readers will be sorry to learn that Mr. Charles Spencer of Aylesbury has just died. A fall from his dog-cart sustained some time ago resulted in persistent impairment of health, and led to his retirement from practice. The immediate cause of death was apoplexy, apparently without premonitory symptoms. Appreciation of the deceased gentleman's conscientious and useful work was evidenced by the general respect and sorrow which have followed his remains to the grave, not unmixed with honest regret for the irritating incident which embittered the last few weeks of his life.

PAGE v. HARRISON.

IN this case Mr. C. Russell, Q.C., made an application on Wednesday, before Mr. Justice Grove and Mr. Baron Huddleston, for a new trial on the ground that the verdict was against the weight of evidence. The arguments were concluded on Thursday, and their lordships reserved their decision until after the result of the suit for divorce brought by Mr. Harrison against his wife shall have become known.

IN view of the approaching retirement of Professor Alfred Stillé from the chair of Medicine in the University of Pennsylvania, many of the most prominent physicians and surgeons of Philadelphia propose to invite the Professor to a public banquet in his honour.

WE learn from the Medical Reports of the "Imperial Maritime Customs" that an attempt has been made to provide more, if not better, accommodation for small-pox cases at the General Hospital, Shanghai.

THE German Government is reported to have under consideration a law making it necessary for students who wish to obtain degrees in German universities to take all their courses in these universities. The proposed measure is objected to by the authorities of the Swiss universities, where it is customary for a certain portion of German students to spend part of their time; the percentage of German medical students in the three Swiss universities varying from 2·5 to 10.

AT the meeting of the Royal Medical and Chirurgical Society on Tuesday next, May 27th, two papers, by Dr. Cayley and Dr. Biss, will be read on the Treatment of Cavity of the Lung by Paracentesis. Several of those who have experience in this method will attend, and a very interesting discussion is expected.

PLANS for the enlargement of the medical school of the University of Melbourne have been approved by the Council, and the building operations, to cost £10,000, are to be commenced at once.

THE Local Government Board have, it appears, consented to the application of the Metropolitan Asylum managers to use the Fulham Hospital for the reception of small-pox patients.

SIR SPENCER WELLS has received the decoration of Commander of the Royal Norwegian Order of St. Olaf, forwarded by direction of His Majesty the King of Sweden and Norway.

A SCHEME is on foot for forming a health resort in Brighton, similar to "The Hall" at Bushey. A site has already been fixed upon, and negotiations for its purchase are in progress.

THE river steamer *Albert Victor* is to be purchased by the managers of the Metropolitan Asylums Board as an auxiliary to the hospital ships now stationed in the Lower Thames.

WE understand that there are as many as eleven candidates for the Conservatorship of the Museum of the Royal College of Surgeons.

THE distinction of C.B. has been conferred on Brigade Surgeon Edmund Greswold McDowell, of the Army Medical Department.

IT is stated that the cultivation of cinchona trees is about to be introduced in Guatemala.

THERE is an interesting leading article on Indian Pharmacognosy in the *Pharmaceutical Journal* of May 17th.

UNIVERSITY COLLEGE.—On the 21st inst. the distribution of prizes in the Faculty of Medicine in connexion with this institution took place. From the report which was read it appears that during the past year 370 students attended the medical classes and University College Hospital, 93 being freshmen. Of the 24 who obtained the degree of M.D. in the University of London, nine were students of University College. Of 65 who took the M.B. degree, 12 were students of the same college. The prizes, which were distributed by the Earl of Kimberley, President of the College, included the Entrance Exhibitions, £80 each, in the competition for which E. B. Hastings, of Huddersfield, and G. E. Rennie, of Sydney, were bracketed equal, and another of £40, won by C. H. Fernau, of Buenos Ayres; the Atkinson-Morley Scholarship, £45 per annum for three years, was gained by H. Litlewood; the Atchison Scholarship, £59 per annum for two years, and the Bruce Medal, were both won by J. H. E. Brock, of Madras.

COPENHAGEN AND THE INTERNATIONAL MEDICAL CONGRESS OF 1884.

No. III.

THE invitations for the International Medical Congress in Copenhagen have already been accepted by from 500 to 600 medical men from all countries, but chiefly from England and France, and amongst these are many whose names are well known in medical science and practice. Such are: Sir J. Fayrer, Sir W. Gull, Sir J. Lister, Sir W. Mac Cormac, Sir J. Paget, Sir Spencer Wells, Drs. Althaus, Ashby, Barker, Barlow, Bennet, Bryant, Chiene, Ewart, Duncanson, De Chaumont, Grainger Stewart, Braxton Hicks, Klein, Morell Mackenzie, Morris, Ogston, Playfair, Shuttleworth, Felix Semon, A. Simpson, Lawson Tait, Thornton, and Watson, from England; Profs. Bosworth, Bulkley, Solis Cohen, Austin Flint, and Delavan, from America; Profs. Paul Bert, Biedert, Chauveau, Lucas Championnière, Hayem, Malassez, Ménière, Pasteur, Ranvier, Ricord, and Villemin, from France; Profs. Credé, Czerny, Esmarch, Eulenburg, Graefe, Henoch, Hitzig, Kölliker, Liebermeister, Ludwig, Mosetig-Moorhof, Schede, Virchow, Volkmann, and Ziegler, from Germany; Profs. Bizzozero and Bottini, from Italy; and Profs. D'Espine, Key, Prevost, Reverdin, Schiff, Vogt, and Wreden, from other countries.

As in former Congresses, all possible help will be given to the foreign guests in matters of lodging, &c. As Copenhagen is crowded with travellers in the summer, and especially in August, it will be impossible to get rooms in the hotels for all the guests expected. However, many private people have hospitably offered their rooms to foreign medical men, and it is hoped that every guest will be satisfactorily lodged; but it will be necessary to apply for rooms in good time, and the earlier this is done the better.

There are different routes from England to Copenhagen. The shortest is *vid* Queensboro', Flushing, Hamburg, Kiel, and Korsór, taking thirty-eight hours from London to Copenhagen. There is a train leaving London at 8.25 P.M. for Queensboro', from there a steamer at 10.10 P.M., arriving at Flushing the next morning at 6.30, then by train through Holland and the north part of Germany, arriving at Hamburg at 9.15 P.M. At Hamburg one has to go from the arrival station to another, "Klosterthor" (it is always best to take a cab), from which the train starts for Kiel. On leaving Hamburg, passengers have to submit to the inconvenience of having their luggage examined for the second time in Germany. At 12.40 (night), soon after the arrival of the train, the Royal Danish mail steamer which is lying close to the railway station leaves Kiel, and arrives at Korsór in the morning, whence the trains start at 8 o'clock A.M., arriving in Copenhagen at 10.30 A.M. At all the principal railway stations in London through tickets are to be obtained to Copenhagen, the fares being about £6 first class and £4 10s. second class. At present return tickets are not issued for Copenhagen, but may be obtained as far as Hamburg at either Victoria, Holborn, or Ludgate-hill; it is then easy to book from Hamburg to Copenhagen. The return ticket for Hamburg costs £6 12s. first class, the ticket from Hamburg to Copenhagen £1 12s.; the return journey from Copenhagen to Hamburg will be cheaper, the Danish steamship and railway companies having undertaken to carry all members of the Congress gratis. The return tickets to Hamburg are only available for thirty days, including the day of issue and expiration. For those who wish to avoid the sea passage of eight hours, the route *vid* Dover, Calais, Lille, Aix-la-Chapelle, Cologne, and Hamburg may be recommended, the sea voyage being much shorter. This route is about nine hours longer, but only a little more expensive, and through tickets are also to be had on this route. The crossing from Kiel to Korsór can also be avoided by going through Jutland, which takes exactly the same time. Another route from London to Copenhagen is *vid* Dover, Ostend, Bremen, and Hamburg, or *vid* Harwich, Rotterdam, and Hamburg, but these two routes offer no particular advantage. For people who like a long sea voyage, there is the route *vid* London and Hamburg, but the steamers are hardly to be recommended. Finally, a Danish steamer runs once a week from London to Esbjerg, a town on the west coast of Jutland, and this route is the cheapest of all. The steamers running from London, Hull, or Newcastle to Copenhagen are not adapted for first-class passengers, and the voyage occupies nearly three days.

It has already been said that it would be impossible for Copenhagen to compete with London in the magnificence or number of entertainments offered to her guests, but everything will be done that lies in the power of the Danes to lighten the fatigues of travel. Unfortunately, there are but few rich private individuals to help in this pleasant task, but it is expected that the King, who is the patron of the Congress, will entertain some foreign guests at dinner. The corporation also purpose giving a dinner to as many guests as the largest public room in the town will accommodate. Besides, there will be excursions, festivals, &c. To arrange all matters of this nature a reception committee has been formed, consisting of eleven members. It is to be hoped that these gentlemen will succeed in what is certainly not their wish alone, but that of the whole Danish nation—viz., that the foreign guests may feel that their welcome is a hearty one, and that their time has not been wasted in visiting the capital of one of the smallest and most ill-fated nations in Europe.

THE NEW UNIVERSITY BUILDINGS, EDINBURGH.

THESE buildings, which were formally opened during the Tercentenary celebration, are now nearly completed, the contractors being busy putting the finishing touches to the structure. The style of architecture adopted is Italian of the cinque-cento period.

The buildings are arranged round two large quadrangular courts, which serve the double purpose of promoting ventilation and increasing the facilities for lighting. The north court, which lies parallel to the Teviot-row front, measures 127 ft. by 85 ft., and is reached through the great central entrance, consisting of a spacious archway for carriages, and smaller arched passages separated by rows of pillars for foot passengers. The buildings to the street in Teviot-row are devoted to the departments of materia medica and medical jurisprudence. The latter department of science has been accommodated, on the ground and first floors, to the east of the main entrance, with an excellent and complete suite of apartments, including a spacious class-room capable of holding 250 students, a private laboratory, museum, apparatus-room, &c. On the west side of the main entrance the ground floor is appropriated as students' common room and library, while the first floor above affords a room for practical chemistry, measuring 60 ft. by 25 ft., and having accommodation for 400 students. Over this the department of materia medica has been provided with large and airy apartments. The entire upper floor of the range has been devoted to this section, and the practical room is 74 ft. by 25 ft., and is lighted both from the side and a skylight running its entire length. A large class-room, with accommodation for 350 students, immediately over that of the medical jurisprudence, has been placed to the quadrangle side of the building, while the department has also been provided with a museum, private laboratory, and other rooms. The chemistry department is situated in the north-west corner of the buildings and occupies nearly the entire corner.

The block running between the north and south courts is entirely devoted to the great anatomical museum, for which it affords a magnificent hall 112 ft. by 39 ft., and 40 ft. in height, round the interior of which two tiers of galleries have been carried. The hall is thoroughly well lighted both from the roof and each side of the museum. At the east end of the quadrangle, on the level of the ground floor, is a commodious vestibule, communicating at its south end with a staircase rising from the basement. This vestibule is reached from the north court by a covered way carried under the vestibule. The east end of the south court is occupied by the anatomy class-room, 57 ft. by 42 ft., with accommodation for 500 students, which presents to the quadrangle a pleasing semicircular outline, and occupies the entire height of the building. In connexion with this department there are on the east side a professor's retiring-room and work-room, and in the extreme south-east corner of the building a bone-room 39 ft. square. Above the vestibule of the museum the class-room

for the practice of physic is situated, and being on the upper floor has the great advantage of having an open roof. It has accommodation for 330 students. Contiguous to this class-room there are a small museum and a retiring room for the professor, while south of these there are a practical room and museum belonging to the surgical department, the class-room for which is situated immediately above the bone-room, in the south-east corner of the buildings, and by the addition of a gallery has accommodation for 530 students. The upper floor of the range of buildings which forms the south side of the south court, and measures 107 ft. by 39 ft., has been utilised as the dissecting-room. The roof has been formed in ridges and glazed towards the south, and affords as much steady light as it is possible to get. The floor below has been divided so as to give accommodation for various sections. Adjoining the anatomy class-room on this floor there are a microscope-room, 40 ft. by 17 ft., with splendid north light, along with accommodation for assistants and demonstrators; while the remainder of the space on this flat has been allocated to a laboratory, 40 ft. by 21 ft. (for teaching physiological chemistry), a histological laboratory, and other rooms requisite for this department of research.

Coming now to the west front—that facing the meadow walk—the first thing which attracts notice is the physiology class-room, 40 ft. square, having a preparation room, 30 ft. by 18 ft., on the east side, and a gallery on the west side, where microscopes have been laid out for the use of students. Above this class-room there are the galvanometer and other rooms for the physiological and histological departments. The midwifery and pathology sections have been provided with suites of rooms in this front between the physiology and chemistry sections. The class-rooms throughout are constructed internally on the same principles, and thoroughly ventilated. Behind the professor's platform, and almost on a level with the lowest benches, are two concealed openings for letting into the room currents of cold air, which, after circulation, is drawn through large ventilators near the roof to the great shaft. This shaft rises above the buildings 175 ft. from the base, and its suction is increased by 1000 ft. of hot water coil and the tubes leading to it. The introduction of a flanged and grooved patent window-frame makes the windows air-tight and lock-fast. In the chemical department the arrangements are of a most effective description, and must prove of decided advantage both to the professor and his students; for instead of each student as hitherto having to make small quantities of oxygen and hydrogen as he might require it, the more economical method of making gases in large quantities and laid on to the various working tables has been adopted. The same method has likewise been carried out in regard to distilled water—the heating apparatus connected with the department being brought into use.

VON PETTENKOFER ON THE POISONOUS EFFECTS OF COAL GAS.

THE general question of the action of coal gas, whether before or after combustion, is naturally connected with the subject of the influence exercised by its various component parts on the human organism. There are, however, several important points specially relating to the action of gas which has escaped from underground pipes, and it is to this portion of the subject that Dr. von Pettenkofer has lately been giving special attention, the facilities as to experiments afforded by the Munich Hygienic Institute having been of notable assistance in its elucidation. The circumstance that in its passage through a layer of earth gas loses its smell to a considerable extent, renders such escapes particularly dangerous. In a lecture recently delivered, Dr. von Pettenkofer gave some interesting details of authenticated cases, in which results of a more or less serious character had been produced by causes not at first apparent, but which had been afterwards referred to the effects of underground escapes of gas. At Roveredo two sisters, who slept in the basement of a house, awoke on three successive mornings suffering from violent headache and a general feeling of illness. This circumstance was attributed to the effects of an iron stove with which the apartment was heated, which was removed previous to the fourth night, when the mother shared the same room. The night was extremely cold and the roadway was frozen. On the following morning, none of the inmates making their appearance, the door was broken open, and the three women were found motionless, the daughters being dead and the mother so affected by gas-poisoning that she only survived a few days. A similar case occurred in 1871 at Cologne, when three persons of one family were killed in a single night. In 1879 the superintendent of a convict prison at Breslau died, and it was not until his sons had been found unconscious after sleeping in the room where he had died that the effects of gas were distinctly traced in connexion with his decease. The young men soon recovered when brought into the fresh air. In all these cases the gas escaped from broken pipes under the roadway, and situated at a distance respectively of 35, 98, and 35½ feet from the apartments where it had exercised a noxious influence. Another instance has been recorded in Breslau, where the distance was 115 feet. At Cologne the gas passed through a sewer-channel and through the floor, while in the other cases it traversed layers of earth. Dr. Max Grueber has proved that the removal from gas of its carbonic oxide allows it to be safely mixed with the air breathed by animals, which would, under ordinary circumstances, suffer from the presence of that oxide. Hence Dr. von Pettenkofer urges the necessity of gas engineers studying the question of its removal, such treatment having been successful with reference to other chemical agents. Carbonic oxide acts upon the blood-corpuscles. The expulsion of oxygen from them allows of the union of the oxide with hæmoglobin in such a manner that the presence, even to a very limited extent of this combination, renders the blood unserviceable for vital processes. Dr. Grueber's researches have also demonstrated that the noxious properties of the agent in question rather depend upon its degree of concentration than upon the duration of its action, the human organism having at its command the means of freeing itself from carbonic oxide when present in small quantities. Though acting directly on the blood, carbonic oxide, according to experiments on animals, affects by means of that fluid the brain and spinal marrow. Unsteadiness in movement and weakness follow, and when the concentration is of a high degree, convulsions and death ensue. It is calculated that human life could not exist for more than thirty to sixty minutes under the influence of carbonic oxide at a high degree of concentration. The want of uniformity in the effects described in reference to the three instances quoted is attributed, by Dr. von Pettenkofer, to the inequality of the proportion of carbonic oxide present in the air of the rooms at various times. The fact of these cases having, as a rule, occurred in winter has been the subject of detailed investigation, and the result arrived at by Dr. von Pettenkofer is that the normal heat of the rooms had attracted the gas, the difference of temperature between the internal and external air being much greater in winter than in summer. The variation in the degree of cold between one night and another would, in his opinion, sufficiently account for the difference in the gravity of the effects produced on the various occasions referred to, the gas being in some instances less forcibly attacted than in others.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

THE annual general meeting of this Society was held at 53, Berners-street, on Tuesday, the 13th inst., at 5 P.M., Sir James Paget, Bart., President, in the chair. From the report read and adopted it appeared that the members of the Society number 370, no increase on the previous year; eleven new members had been elected during the year, six had died, and five had resigned. Fifty-seven widows and five orphans were in receipt of grants, three widows less than in 1882; no fresh applications for assistance had been made during the year. A sum of £2776 had been distributed and the expenses of the year amounted to £226. The receipts available for payment of grants and expenses had been £3160. Two legacies had been paid, which, with a life subscription of thirty guineas, had been added to the funded property, making an increase of £311 10s. to the amount standing in the names of the trustees. Mr. James T. Ware and Sir Erasmus Wilson were elected Vice-Presidents in the place of Sir James Paget, elected President on the retirement from office of Sir George Burrows, and Mr. Charles Hawkins resigned. Dr. Kempster, Mr. Felce, Mr. Brodhurst, Mr. B. T. Lowne, Dr. Herbert Davies, and Dr. Russell Reynolds

were elected directors, in the place of the six senior who retired by rotation. A grant of £15 was made under a special bye-law to the daughter of a deceased member.

The Chairman, Sir JAMES PAGET, in moving a vote of thanks to the editors of the medical journals was pleased to have the opportunity of expressing how much the Society was indebted to the editors for the kindness and readiness they had always shown in forwarding and making known to the medical profession the great benefits the Society was able to confer on the widows and orphans of deceased members.

Mr. CHARLES HAWKINS moved a vote of thanks to the Chairman for his great kindness in taking the chair at the meeting.

WILLS OF MEDICAL MEN.

THE will of Sir John Rose Cormack, M.D., Chevalier of the Legion of Honour, Physician to the Hertford British Hospital at Paris, who died at his residence, 364, Rue Saint Honoré, on May 13th, 1882, was proved in London on the 18th ult. by Charles Edward Cormack, the son, the value of the personal estate in this country exceeding £1500. The testator leaves all his property to his wife, but, as she has also since died, it passes under her will to their children.

The will and codicil of Thomas Ashton, M.D., late of Norwood, Dunham Massey, in the county of Chester, who died on Dec. 15th last, were proved on the 18th ult. by Mr. Richard Ashton, the brother, and Mr. George Clay, the executors, the value of the personal estate exceeding £36,000. The testator leaves an annuity of £200 for life to Richard Baylis Bennett; an annuity of £250 for life to George Bridges Rodney Anderson; and the remainder of the income of his property to Mrs. Esther Bennett for life; at her death he leaves £100 per annum for life to Mrs. Mary Esther Davies; and subject thereto settles all his real and personal estate on his great nephew, George Walford Henshaw Walford.

The will of Ridewood Madden, M.D., formerly of Woodslea, Bampford, Speke, near Exeter, but late of 1, Bloomfield-place, South Synecombe, Bath, who died on Feb. 28th last, was proved on the 21st ult. by Mrs. Flora Madden, the widow, and the Rev. Wyndham Monson Madden, the brother, the executors, the value of the personal estate in the United Kingdom exceeding £8000. The testator, after making some bequests to his wife and children, leaves the residue of his property upon trust for his wife for life, and at her death to be divided between his daughters Flora Macdonald, Isabella Ridewood, and Ida Maude Mary, and his son Henry Prendergast.

The will of Maurice Schulhoff, M.D., late of 46, Brook-street, Grosvenor-square, who died on March 27th last, was proved on the 28th ult. by Mrs. Frances Ellen Schulhoff, the widow and sole executrix, the value of the personal property amounting to over £7000. The testator leaves all his property to his wife for her own use absolutely.

The will and two codicils of Mr. David Midgley Cockroft, Surgeon, late of Todmorden, Yorkshire, who died on March 9th last, was proved at the Wakefield district registry, on the 24th ult. by Mr. Abraham Cockroft (the son of his brother Abraham) and Mr. Abraham Cockroft (the son of his brother John), the executors, the value of the personal estate amounting to over £5000. The testator bequeaths £500 to his sister Mrs. Hannah Parker; and there are pecuniary and specific legacies to nephews and nieces, and to his housekeeper. The residue of his property, real and personal, is to be divided between his nephews Abraham (the son of his brother Abraham) and William (the son of his brother William).

The following legacies have recently been left to hospitals and other medical institutions:—Mr. Oxley English, of 19, Pall-Mall, £1000 to Charing-cross Hospital, £500 each to the Middlesex Hospital and the West Norfolk and Lynn Hospital, and £200 to the City of London Truss Society.—General Sir David Russell, K.C.B., Colonel 84th Regiment, of 3, Elvaston-place, South Kensington, £50 to the Edinburgh Medical Missionary Society.—Mr. Richard Haworth, J.P., of Mersey Bank, Didsbury, Lancashire, cotton-spinner and manufacturer, £500 to the Manchester and Salford Hospital Sunday Fund.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5863 births and 3540 deaths were registered during the week ending the 17th inst. The annual death-rate in these towns, which had been equal to 22·7 and 21·8 per 1000 in the two preceding weeks, further declined last week to 21·1. During the first seven weeks of the current quarter the death-rate in these towns averaged 21·9 per 1000, against 22·1 and 23·2 in the corresponding periods of 1882 and 1883. The lowest rates in these towns last week were 16·2 both in Brighton and Norwich, 16·5 in Sunderland, and 16·6 in Wolverhampton. The rates in the other towns ranged upwards to 25·5 in Leeds, 26·4 in Oldham, 27·0 in Plymouth, and 27·5 in Manchester. The deaths referred to the principal zymotic diseases in the twenty-eight towns were 539, being fewer than in any of the four previous weeks; they included 182 from whooping-cough, 151 from measles, 70 from scarlet fever, 43 from small-pox, 35 from "fever" (principally enteric), 35 from diarrhœa, and 23 from diphtheria. The lowest death-rates from these diseases occurred last week in Preston, Bradford, and Sunderland; and the highest in Liverpool, Bolton, and Portsmouth. Whooping-cough caused the greatest mortality in Bolton, Huddersfield, Liverpool, and London; measles in Oldham, Plymouth, Portsmouth, and Wolverhampton; and scarlet fever in Cardiff, Sheffield, and Leeds. The 23 deaths from diphtheria in the twenty-eight towns included 11 in London, 4 in Portsmouth, and 3 in Leeds. Small-pox caused 30 deaths in London (excluding 12 registered in the Metropolitan Asylum Hospitals outside Registration London, in Dartford sub-district), 5 in Liverpool, 3 in Sheffield, 3 in Hull, and 1 in Sunderland. The number of small-pox patients in the metropolitan asylum hospitals, hospital ships, and camp hospital, which had steadily increased in the eight preceding weeks from 148 to 735, was again 735 on Saturday last; 112 new cases were admitted to these hospitals during last week, against 107 and 266 in the two previous weeks. The deaths referred to diseases of the respiratory organs in London, which had been 360 and 326 in the two preceding weeks, further fell to 295 last week, and were 10 below the corrected weekly average. The causes of 74, or 2·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bristol, Brighton, Leicester, Bradford, and in four other smaller towns. The largest proportions of uncertified deaths occurred in Halifax, Derby, Hull, and Newcastle-upon-Tyne.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 23·8 and 24·9 per 1000 in the two preceding weeks, was 24·5 in the week ending the 17th inst.; this rate was 3·4 above the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 17·9 and 18·5 in Greenock and Perth, to 24·7 in Edinburgh and 27·5 in Glasgow. The deaths in the eight towns included 93 which were referred to the principal zymotic diseases, against 93 and 94 in the two preceding weeks; 43 resulted from whooping-cough, 13 from measles, 12 from scarlet fever, 11 from diarrhœal diseases, 7 from "fever," 7 from diphtheria, and not one from small-pox. The rate from these diseases averaged 3·9 per 1000 in the Scotch towns, and exceeded by 0·7 the rate from the same diseases in the large English towns. The 43 deaths from whooping-cough in the Scotch towns showed an increase of 2 upon the number in each of the two previous weeks, and included 18 in Edinburgh, 17 in Glasgow, and 5 in Aberdeen. The 13 deaths from measles were fewer by 4 than the number in the previous week; 4 occurred in Glasgow, and 3 both in Leith and Paisley. The 11 deaths attributed to diarrhœal diseases showed a further decline from recent weekly numbers, and corresponded with the number in the corresponding week of last year. The 12 deaths from scarlet fever, of which 9 occurred in Glasgow and 2 in Edinburgh, exceeded the number returned in any recent week. Of the 7 deaths referred to diphtheria, 3 occurred in Edinburgh and 2 in Glasgow; and 4 of the 7 deaths from "fever" occurred in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had steadily increased in the four pre-

ceding weeks from 109 to 148, fell last week to 100, and were 11 below the number returned in the corresponding week of last year. The causes of 87, or nearly 15 per cent., of the deaths in the eight towns were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had steadily increased in the five preceding weeks from 23·0 to 31·8 per 1000, declined to 25·7 in the week ending the 17th inst. During the first seven weeks of the current quarter the death-rate in the city averaged 28·4 per 1000, whereas it did not exceed 20·9 in London and 22·7 in Edinburgh during the same period. The 173 deaths in Dublin last week showed a decline of 41 from the high number returned in the previous week, and included 18 which were referred to the principal zymotic diseases, against 19 and 11 in the two previous weeks; of these 8 resulted from scarlet fever, 4 from "fever" (typhus, enteric, or simple), 2 from measles, 2 from whooping-cough, 2 from diarrhœa, and not one either from small-pox or diphtheria. These 18 deaths were equal to an annual rate of 2·7 per 1000, the rate from the same diseases being 3·7 in London and 5·0 in Edinburgh. The 8 deaths from scarlet fever in Dublin exceeded those in the previous week by 2, as did the 4 deaths referred to "fever;" the fatal cases of measles and whooping-cough were also more numerous. Three deaths resulted from violence, and 36 were recorded in public institutions, 30 fewer than those in the previous week. The deaths of infants showed an increase, while those of elderly persons showed a marked decline. The causes of 24, or nearly 14 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

ARMY MEDICAL DEPARTMENT.—Brigade Surgeon Charles Moore Jessop has been placed on retired pay, with the honorary rank of Deputy Surgeon-General. Brigade Surgeon George Monlas Slaughter, to be Deputy Surgeon-General, vice J. Ekin, M.B., C.B., retired. Surgeon-Major Henry Knaggs to be Brigade Surgeon, vice G. M. Slaughter. Surgeon-Major Henry Hummerston Burford is placed on retired pay.

ADMIRALTY.—The following promotions have been made in Her Majesty's Fleet for services rendered with the Naval Brigade forming part of the Soudan Expeditionary Force:—Staff Surgeon J. H. Martin to be Fleet Surgeon; Surgeon H. E. F. Cross to be Staff Surgeon; Surgeon T. D. Gimlette will be promoted to Staff Surgeon on April 1st, 1885.

The Lords of the Admiralty have awarded the Greenwich Hospital Pension of £50 a year for Fleet and Staff Surgeons to Retired Deputy Inspector-General of Hospitals and Fleets David Lyall, M.D.

The following appointments have been made:—Fleet Surgeon Astley Cooper, to the *Indus;* Staff Surgeon Thomas D'A. Bromlow, M.D., to the *Turquoise;* Surgeon John J. Dinnis, M.D., to the *Turquoise;* Surgeon Joseph H. Whelan, to the *Jackal.*

RIFLE VOLUNTEERS.—5th Durham: F. W. Gibbon, Gent., to be Acting Surgeon.—5th Devonshire: Acting Surgeon William Gifford Scott, M.B., to be Surgeon.—5th Lancashire (the Liverpool Rifle Volunteer Brigade): Surgeon Henry George Samuels resigns his commission; also is permitted to retain his rank and to continue to wear the uniform of the corps on his retirement. Acting Surgeon Robert Samuels Archer, M.B., resigns his appointment. Acting Surgeon George Westby to be Surgeon. William Irvine, M.D., and Arthur Cresswell Rich, M.B., to be Acting Surgeons.—1st London (the City of London Rifle Volunteer Brigade): Acting Surgeon Frederick St. George Mivart resigns his appointment.—2nd (South) Middlesex: Francis Alexander Stokes, Gent., to be Acting Surgeon.—20th Middlesex (Artists'): Acting Surgeon Clinton Thomas Dent resigns his appointment.

FOR the maintenance of hospitals in New South Wales there was raised during 1882 the sum of £31,232 by means of voluntary contributions, which amount was supplemented by Government grants to the extent of £42,751.

Correspondence.

"Audi alteram partem."

"REVACCINATION."

To the Editor of THE LANCET.

SIR,—The spirit of your article of April 26th on the above subject was so thoroughly practical, and the recommendations were so sound, that I wish to add my testimony in corroboration. During the severe small-pox epidemic at Newcastle in 1872, a well-known physician there asked me to revaccinate him. He had been vaccinated in infancy, and also once subsequently, but wished "to make assurance doubly sure." Well, I vaccinated him on five separate occasions in about as many weeks, without the slightest effect. At each attempt I was careful to select fresh "matter." A week or two after the fifth trial he called on me again, saying he was not satisfied with the uncertainty he felt as to his protection from small-pox. To please him, therefore, I attacked the arm a sixth time. A few days after this he astonished me by exhibiting triumphantly very well-marked results of successful vaccination. Among the many lessons which the above epidemic taught me this experience made a lasting impression. Whilst many medical men were assuring their cases of unsuccessful vaccination in such terms as these, "Now you may make your mind quite easy, the vaccine has not 'taken,' so you are perfectly protected from any danger of small-pox," I, on the other hand, carefully impressed my patients with a ruling of a different kind, thus:—"You can argue nothing from the non-success of the vaccination. Had it taken then, I could have assured you of protection. The result being simply negative, you must be done again." Such advice is certainly not much relished by one's clients, who, as a rule, are only too glad to shirk the ordeal if they can fix the responsibility upon the medical adviser. The case of my medical friend was, however, only one among many where repeated operation succeeded after previous failures. In a large mercantile establishment, where I revaccinated about 150 young people—men and women—and acted persistently on the above rule, there were three individuals who absolutely refused to be revaccinated. Two were discharged, the other being sent to a neighbouring town. All three had small-pox afterwards very badly. The last named was, however, nursed all through a long illness by one of the other vaccinated persons, who never suffered any harm in consequence. Not one of the 150 cases above cited took small-pox. Though such experiences are no doubt familiar to my medical brethren, perhaps this relation of absolute facts may not be out of place. Much of the imperfection in the working of the Vaccination Acts is, I fear, due to the carelessness of medical men themselves. I know a case where a public vaccinator gave a certificate of insusceptibility to vaccination, though he had never even touched the child. This was simply to save himself trouble, and to cover his repeatedly broken promises to attend, when urged by the parents. Unless medical men themselves show earnestness in such important matters, they can scarcely be surprised at lukewarmness on the part of a long-suffering public.

I am, Sir, yours faithfully,

Harrogate, May 14th, 1884. J. GORDON BLACK, M.D. Lond.

To the Editor of THE LANCET.

SIR,—The following may be of interest on the question of revaccination. During the epidemic of small-pox here in 1871 and 1872 I was revaccinated five times without success. The sixth time the operation succeeded. In infancy I was well vaccinated, having typical vaccine marks on my arm, yet, notwithstanding, I contracted a mild attack of small-pox. It may be only fair, however, to state how I contracted the disease. After a pretty hard day's work on a rainy muggy evening, as a short cut, I ran about a quarter of a mile through some wet fields to pay a visit in a dirty hovel. On arriving, I sat down with damp feet, quickened pulse and respiration to examine a very bad case of confluent small-pox. Had I driven to the place and found my patient in a well-ventilated apartment, the chances are I would have escaped the attack. I am, Sir, your obedient servant,

Cork, May 17th, 1884. D. D. DONOVAN.

PROPOSED CHANGE IN THE REGULATIONS OF THE UNIVERSITY OF DURHAM.

To the Editor of THE LANCET.

SIR,—In THE LANCET of Saturday last there is a letter from A. H. Robinson, M.D. Durh., protesting against the proposed change, and describing it as an attempt to lower the character of the University and lessen the value of its degrees. I can only think that your correspondent has never read the regulations respecting the examinations for the degree without residence; had he done so he would not have made such an absurd charge. Your correspondent is not more correct when he speaks of his spending an additional year to get his degree; such a course is quite unnecessary. The curriculum is four years, the same as is required by all the examining bodies, of which, however, one year must be spent in Newcastle. The examination for the M.D. without residence embraces all the subjects required for the ordinary degree except materia medica, but in lieu of this candidates are examined in psychological medicine, medical jurisprudence, and toxicology, subjects which do not form part of the ordinary examination. Then the cost of the ordinary degree is £25, that without residence costs £52 10*s.*; added to which that in the one case twenty-four is the earliest age, as against thirty-one as proposed, and I fail to see how a more severe and more costly examination lowers the value of the degree or degrades the University. I must confess that I likewise am obtuse enough to be unable to see how the admission of an increased number of graduates by a more difficult and costly process is an injustice to the other graduates. The complaint might very well be made that a year's residence at Newcastle is not a sufficient set off against ten years spent in practice, and this identical year spent in London or at a provincial school.

The University of Durham is a teaching as well as an examining body, and in order to guard its interests as an educational establishment it makes the resolution of enforcing one year's attendance at its own college, and in this it does what all other teaching universities do in the interests of their own schools; but it shows its wisdom in allowing men who have spent some years in practice to graduate there, and the opinion that it might, without injury to itself, fix this period of practice at ten instead of fifteen years is shared by a large number of the profession, by graduates of Durham, Cambridge, London, Edinburgh, Glasgow, and St. Andrews, as well as by those who seek its degrees for themselves. Your correspondent further superciliously asks why "these people" do not go to Brussels for a degree? To which I reply, because we are Englishmen and seek an English degree. I may, in conclusion, quote part of a letter I received a few days ago from a graduate of London and Cambridge Universities who is surgeon to one of the largest of the London hospitals. "It appears to me unjust that medical degrees, whatever they may be worth, should be the exclusive property of those only who chance to have connexion with a body, however inferior, as with many of the universities of Scotland and Ireland, empowered to give them. Nor do I think the hardship at all diminished by the existence of the London University, the examinations of which demand an undue amount of the student's time and labour in proportion to others."

I am, Sir, your obedient servant,

Leigh, May 19th, 1884. B. JONES.

To the Editor of THE LANCET.

SIR,—The letters which have appeared in the medical journals during the past few weeks concerning the proposed changes in the regulations for the degree of M.D. of the University of Durham for practitioners of fifteen years' standing have created a very strong feeling amongst graduates and under-graduates, which culminated in a crowded meeting held at the infirmary on the 16th inst., Charles Green, M.D. Durh., medical officer of health for Gateshead, in the chair, at which the following resolutions were unanimously passed:—1. That this meeting hears with great dissatisfaction that there is in preparation a memorial praying the Senate of the University of Durham to alter existing regulations concerning the degree of M.D. for practitioners of fifteen years' standing. 2. That this meeting is of opinion that the proposed alterations would greatly detract from the value of the degree as obtained in the usual course. 3. That the degree obtained by other than the usual course—viz., that of putting in residence, attendance on lectures, and the passing of the several examinations—prejudicial alike to the interests of the University of Durham and to the status of those who have obtained the degree in the orthodox manner. 4. That a humble petition be prepared to present to the Senate, praying it not only to neglect the memorial suggesting the afore-mentioned proposed alterations, but also very earnestly praying it to consider the advisability of abolishing the degree of M.D. for practitioners of fifteen years' standing. 5. That an account of the proceedings of this meeting, together with the resolutions passed, be sent to the medical journals for publication.

A small committee was formed, of which Dr. Green was elected chairman, for the purpose of drawing up a petition in accordance with the above resolutions. A circular is about to be sent to all graduates in medicine of the University of Durham, other than those who have obtained the degree for practitioners of fifteen years' standing, whose addresses appear in this year's Medical Directory. We shall also be glad if those whose addresses do not appear will communicate with us *at once*, as we are anxious that no time shall be lost.

We are, Sir, your obedient servants,

J. A. HUTCHINSON, M.B., M.R.C.S., } Hon. Secs.
C. POPE WALKER, M.R.C.S., }

University of Durham College of Medicine, Newcastle-on-Tyne, May 19th, 1884.

To the Editor of THE LANCET.

SIR,—I must trespass once more on your valuable space in order that I may say a word or two on the letter of Dr. Robinson, which appeared in your last issue. I disagree with him totally, and consider that his letter shows a very unenviable dog-in-the-manger spirit. But the part to which I particularly take exception is that in which he says that those desirous of a university degree "have not cared to fulfil the regular conditions." Now, I am convinced that there are many men who, like myself, have found it absolutely impossible to comply with these conditions. The why and the wherefore of this impossibility in my own case I need not enter upon, but they cannot be exceptional. It is, therefore, gratuitously untrue and unkind to say that we "have not cared" to fulfil the regulations, and it is most certainly hard that we should have to spend the best part of our lives before we can present ourselves for examination. I am, Sir, yours truly,

Holloway, May, 1884. W. HENRY KESTEVEN.

"SURELY THIS IS NOT INSANITY."

To the Editor of THE LANCET.

SIR,—Dr. Andrew Allison, describing the symptoms of an affection which he calls "nocturnal insanity," says: "In the daytime the patient will transact business with ordinary sagacity, and but little suspicion rests upon his mental stamina during business hours; however, about the proper time of retiring to rest indications of insanity take the place of his alleged diurnal rationality. Early in the night he becomes excited, reasons falsely, and controverts the advice of his friends on a supposition that they are plotting his destruction. This state of illusion eventually subsides into expressions of melancholy." On the following day the patient "displays considerable mental and great muscular activity, with a restless anxiety for the completion of orders and an impatience towards those who refuse to assume a diligence in business equal to his own." You quote all this, and more tending in the same direction, and then exclaim, "Surely this is not insanity." I begin to think what it might be if not want of mental health, and, reading further, find you explain what it *is*. You say, "It is a variety of that accidentally induced hypnotism, which consists in what has been described as 'polarisation' of mind, a direct physical result of those vaso-motor disturbances and irregular discharges of nerve force which occur in the cerebrum when the centres are wearied or exhausted." This is a fine passage for quotation, but to the lay reader what does it convey? Nothing. And to the professional? Merely that the patient is suffering from a "mind diseased"; from abnormal or unhealthy cerebration; in fact, that he is *insane* while in the condition

described. What else than "insanity" Dr. Allison could talk of in such a connexion I fail to see.

A person has a few epileptic fits, and I say he is epileptic; he may never have another attack, but he probably will; he may never fall down in public and receive the abhorred commiseration of friends, but the chances are that he will. So, Dr. Allison's patient often "becomes excited, reasons falsely, controverts the advice of friends and believes they are plotting his destruction," and I say he is insane. He may never have another attack, but he probably will; he may never by any overt act make his state known to the world, but if attacks like those described have already frequently appeared the chances are that he will. Again, should this person (who at times "believes his friends are plotting his destruction") murder one of these relatives, would any man with any sense of justice and any knowledge of disease say he was guilty of "wilfully, feloniously, and with malice aforethought" murdering that friend?—even though he were told that it was but "polarisation of mind" which caused the unfortunate creature to commit the act. Or should he during one of the periods of depression which follow his excitement take his own life, what would be the verdict found by any rational jury aware of his previous attacks as described by Dr. Allison? "Sane" and "insane" are, as I understand, used in relation to mental condition as "health" and "disease" are to the bodily state. A man need not necessarily have a cancer or some other of the more malignant of bodily ills to be "out of health" or "suffering from disease"; neither, I presume, need a man be a helpless dement or a raging maniac to be pronounced as "suffering from insanity."

You, Sir, seem to labour under the impression that when a medical man, and especially a specialist, says a person is "insane," he means that the person should be confined in an asylum. Such, I assure you, is not the case. I have known dozens of persons discharged from asylums to their friends' care who at the time of their discharge were possessed of delusions and without doubt insane. Of course, on the discharge of each such person grave risks are run by the person himself and also by the surrounding public; but if the cases be judiciously chosen, the advantages gained, especially by the afflicted one, far more than counterbalance these risks.

You are undoubtedly correct in stating that the neurotic are at all times liable to involuntary and erratic nerve action of all kinds; but when "the pedal changes in their 'barrel-organism'" take the form of nightly delusions that their friends are plotting their destruction, it is not too soon, I think, for Dr. Allison to use the hated word "insanity."

Yours faithfully,

Northampton, May 19th, 1884. S. A. K. STRAHAN, M.D.

*** We gladly print this letter on the principle *audi alteram partem;* but we print it also as a good specimen of the sort of reasoning by which the specialist in mental disease arrives at the conclusion that a man is insane. We contended that the aberrations described by Dr. Allison were not disease but disorder. Dr. Strahan falls back on the broad definition of "insanity," which, of course, may be held to mean anything. According to his argument, everyone who suffers from that form of cerebral disturbance which Marshall Hall playfully described as "temper disease," albeit the only fault is need of food, must be "insane." As in many cases this last-mentioned formidable variety of "mental disease" is apt to come on daily, and in some individuals induce fits of frightful excitability, sometimes characterised by threats to murder the cook, Dr. Allison and Dr. Strahan ought to call it periodical or recurrent mania.—ED. L.

WELLINGTON COLLEGE CONTROVERSY: MEDICAL OFFICER'S APOLOGY.

To the Editor of THE LANCET.

SIR,—Mr. Armstrong's apology in The LANCET of last week was made at the request of some members of the profession in this neighbourhood, who took exception to his letter in THE LANCET of January 26th, and my acknowledgments are due to them for the interest they have taken in the matter, to Mr. Armstrong in having submitted to their judgement, and to you, Sir, for the expression of approval in your editorial note. Yours very faithfully,

Wokingham, May 21st, 1884. J. G. BARFORD.

"CREMATION *VERSUS* BURIAL."

To the Editor of THE LANCET.

SIR,—If Mr. Seymour Haden could prove those who support cremation to be innovators without good reason he would do much to discredit them, but he must use a little stronger reasoning before he can win a verdict. His argument that earth will do as well as fire what we want it to do is, as it seems to me, very weak. What earth does he mean? Does he mean such earth as he may see at the cemetery at Nunhead, for instance, where, in order to carry out the provisions of the Church of England burial service, the sexton hands the clergyman a little sand or dust? the "earth" being masses of clay, hard and stiff. Of two burial-grounds passed as fit for use by the Home Office inspectors, both near a midland town, I know that in one the grave has to be dug, if not in solid rock, in something which so nearly resembles it that I have often wondered what was the use of an inspector and his boreholes; in the other the bottom of the grave was frequently full of water. Does Mr. Seymour Haden mean to say that burial in a water-bearing stratum, in rock, or in thick clay, causes the absorption of the body into the earth? His second argument is one which, had it emanated from anyone less scientific, would have made me laugh. He says that there will be great danger from the sudden distribution of gases, which would otherwise be distributed only after three years. Let us take a place where the annual number of burials is 150. There are, then, now 450 bodies being resolved, and in exact proportion to the daily and hourly requirements of the atmosphere and the growth of vegetation. There are therefore $\frac{450}{3}$ = 150 bodies giving off the gases in each year. Now, if I burn 150 bodies in place of burying them, do I not in each year give off exactly the same amount of gas? (I assume you see his statement to be correct.) I should like to know whether he could affirm, on cross-examination, that, viewing the differences of soil, the state of overcharged burial-grounds, the varying depths at which interments take place, his confident statement about these bodies being resolved "in exact proportion to the daily and hourly requirements of the atmosphere and the growth of vegetation," could be maintained. I think we may ask this witness to stand down; and our counsel, in his reply, well points out that we rely in our case on two grounds which carry more weight than any allegation of this sort. 1. We say that in place of this ideal earth, for which we should have to travel many miles from some parts of London, we have this condition of things prevailing in the majority of country places. The churchyard being almost always on the top of a hill, we have an arrangement whereby, except in cases where the water-supply is artificial, it must almost necessarily be contaminated by the natural drainage. Cremation would do away, in large towns, with precisely the same evils as caused the passing of the Extra-mural Interment Act, minus those remedied by a better system of drainage and water-supply; for cemeteries are now rapidly becoming surrounded with houses; and throughout the country it would do away with a source of infection, which seems to me to have been but imperfectly explored. 2. We claim that by forcing on a *laissez-faire* public a better system of registration of death we should anticipate those evils for which exhumation is (when it is demanded) a poor remedy. In Sir H. Thompson's pamphlet on "Cremation" he shows how imperfect is our present system of registration—I may say how utterly useless. Let me give a fact in my own experience. In the cholera epidemic of 1866 (?) I was waited on by the friends of a man who had died suddenly from that disease. He had lived away from his relations, and they were anxious to avoid an inquest. By their wish I called on the coroner's officer with them. He told them they had come too late, that the inquest had been summoned, and must take place. I left them there, and all I know is that the body was buried two days after with a certificate in regular form. There was not the shadow of fear of foul play as regards his death, but I must say I felt that our boasted security rested on a somewhat frail foundation when the formalities of an inquest could thus be by personal influence obviated. Such an incident can hardly have occurred but once, and if it has happened often, I would rather have the certainty of a due

examination by two appointed medical officers than the doubtful possibility of being able to show the Home Secretary that exhumation was advisable.

We cremationists are not mere enthusiasts seeking for some whim of our own to inaugurate a new system for the disposal of the remains of our friends. It is in the interests of the living, and for greater security of life, that we ask for a return to a practice sanctioned, if any practice is, by the authority of the ages, and for the discontinuance of a system which owes its adoption to the prevalence of gross superstition. I am, Sir, yours, &c.,

BROOKE LAMBERT,
May 20th, 1884. ——— Vicar of Greenwich.

To the Editor of THE LANCET.

SIR,—I have just read Mr. Seymour Haden's letter on Cremation *versus* Burial in your issue of the 17th inst. The statement that the immediate instead of gradual production of gases from the body would cause on any one day a greater quantity of gases is a mistake, and for this reason: At present we bury in great cemeteries, where many funerals take place daily. When we cremate, many cremations will also take place upon one spot. Suppose that the burials and cremations each amount to ten a day, and that while a body is by cremation at once reduced into a quantity of gas, which may be represented by x, it is by burial reduced into the same quantity of gas by gradual equal instalments extending over about 1000 days. Then the quantity of gas daily given off by each buried body will be $\frac{x}{1000}$, and during the 1000 days 10,000 bodies will be buried; so that every day from that cemetery gas amounting to $\frac{x \times 10,000}{1000}$ will arise $= 10x$. Each cremated body gives off x on one day, and one day only; and the ten bodies daily cremated give off $10x$, or exactly the same daily quantity as the buried bodies. I am, Sir, your obedient servant,

Lincoln's-inn-fields, W.C., May 19th, 1884. A. H. HASTIE.

ASIATIC CHOLERA IN THE PIG.

To the Editor of THE LANCET.

SIR,—*A propos* the intelligence wired a week or ten days ago by the Calcutta correspondent of *The Times* that Mr. Vincent Richard had succeeded in inoculating the pig with the specific virus of cholera, and adding that, in his opinion, it is of a chemical nature, and of the fuller details to hand by the last mail as published in your contemporary, the *Indian Medical Gazette*, I think it as well to recall attention to the report of an epidemic of cholera in cats at Ahmednugghur and Sirror, published early this year by the Government of Bombay, and which I noticed briefly whilst in India in these columns. That report is of peculiar interest so far as the causation of cholera in the cat went, inasmuch as at the time when this epidemic in the cat was at its height an epidemic of cholera was prevailing (in the human subject) at those places, and from what I could gather from a careful perusal of the report in question, it appeared that the feline epidemic took its origin from that in the human subject or from a common *fons et origo*, whatever that may have been. I would, also, invite special attention at the present juncture to a very interesting report on an epidemic of cholera in cats at Delhi, in, I think, the year 1875, and published in THE LANCET of 1876 by Dr. Fairweather, of Her Majesty's Indian Medical Service at that time civil surgeon of that place. Since that report was published I have several times experimented with cholera evacuations to see if I could produce cholera in dogs, cats, and rats, but with negative results. A fact in obstetrics worthy of mention in this connexion, and which came under my observation in 1877, is the occurrence of some few cases of unmistakable cholera in the new-born, in one of which, I may observe, there was no cholera in the mother, but the infant almost immediately after birth began to purge and vomit; the characteristic rice-water evacuations were observed by me, and it died within a couple of hours collapsed. Assuming that this was a case of cholera, of which I thought there was no doubt, the question is, How was the poison conveyed—immediately after birth or in utero? From India I sent tolerably full notes of these cases to Dr. Matthews Duncan, who very kindly read my paper before the Obstetrical Society of London, and which will probably be found published in its Transactions of 1877 or 1878. Against the views that are now being advanced by Mr. Richards there is, however, this to be said, that in India it is a notorious fact that village pigs feed on human excreta. At some time or another these are choleraic, but the occurrence of the disease in the pig has never been heard of. I trust that I will not be understood to suggest that the researches of this gentleman, to whom medical science is not a little indebted for his valuable researches in connexion with snake (cobra) poison, are open to question, though seeming to be plausible; but that the subject is of such paramount moment and vital concern that we cannot but scrutinise most cautiously every step and link in the chain of evidence which comes before us. We may therefore welcome what is now before us from the pen of Mr. Richards, and hope that he will continue his researches and observations, and, to use the words of Dr. Wilks (Harveian oration of 1879): "We take the world as we find it, and endeavour to unravel its mysteries, but of the alpha and omega we know not." I am, Sir, your obedient servant,

Edinburgh, May 10th, 1884. JOHN C. LUCAS.

SOCIETY OF WIDOWS AND ORPHANS OF MEDICAL MEN.

To the Editor of THE LANCET.

SIR,—It is to be regretted that this Society does not obtain the unanimous support of the profession. There are, however, several reasons which interfere to prevent it, and with your permission I will mention two which are not without influence. First, the voting system; secondly, the necessity of obtaining a certificate of health by the proposing subscriber. Five years since I was desirous of subscribing, but found it incumbent upon me to submit to this. Some years before I had a severe illness, contracted during hospital work, and as a result my health escutcheon is not quite clean, and I found myself under the necessity of seeking as a favour permission to join this Society or leave it alone; the latter I have done. There are many others like myself, also engaged in arduous practice, able to work well, but not absolutely sound, and they do not care to expose themselves to a possible refusal. The Society may be quite right, but this accounts for many, besides myself, who are unable to subscribe. I am, Sir, yours faithfully,

May 14th, 1884. J. R. L.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS AND REFORM.

To the Editor of THE LANCET.

SIR,—It is quite impossible that the controversy between the Council and the great body of the Fellows of the Royal College of Surgeons can remain where it is. As the mover of the resolutions which were carried at the late meeting, and which have since been so ignominiously ignored by the Council, I feel bound to take further action. I propose, therefore, at once to place myself in communication with the Fellows in order that some united action may be decided upon. Yours faithfully,

Plymouth, May 17th, 1884. PAUL SWAIN, F.R.C.S.

"DETERMINATION OF SEX."

To the Editor of THE LANCET.

SIR,—A letter appeared in your impression of April 12th on the above subject, signed "Sigma," in which the writer maintains that "the male parent furnishes the male germ and the female the female germ." It is not necessary to waste the time of your readers in arguing against the suggestion until such time as the writer explains the fact, well known to all apiarists, that an unimpregnated queen or female bee lays eggs which produce males only, and that a fertile worker, or imperfectly developed female, that is never impregnated, always lays drone or male producing eggs.

I am, Sir, yours &c.

London, May 21st, 1884. W. B. TEGETMEIER.

LIVERPOOL.

(From our own Correspondent.)

THE SEAMEN'S DISPENSARY.

IN an obituary notice of the late Mr. H. A. Bright, a local magistrate and shipowner, the *Liverpool Mercury* of May 9th says:—"During his chairmanship (of the Sailor's Home) the dispensary in the Custom-house Arcade was opened mainly through his exertions, and it has proved of the greatest service in the protection of sailors from the greedy and mischievous quacks who seek to prey upon them."

A HIDEOUS SUPERSTITION.

At the assizes on Monday, May 19th, before Mr. Justice Day, Peter Murray, a miner, was sentenced to twenty years' penal servitude for a rape on a girl aged fourteen. The latter was admitted into the Lock Hospital on March 20th suffering from primary and secondary syphilis. On the following day the prisoner was arrested, and on being examined was found to have an indurated ulcer on the penis, indurated inguinal glands, and condylomata ani. He had been suffering for some considerable time, and made a statement to one of the witnesses at the trial to the effect that he had connexion with a young girl with the object of being cured of his disease. This superstition prevails largely in Lancashire, as elsewhere, in spite of the heavy sentences which are always inflicted when disease is communicated.

THE INFIRMARY FOR CHILDREN.

Dr. E. Hyla Greves and Mr. Rhinault N. Pughe have been elected Physician and Surgeon to the Infirmary for Children. All connected with the institution are to be congratulated on these appointments, both gentlemen having the highest qualifications for their respective appointments and being most favourably known to their professional brethren. After twenty years' most honourable service as surgeon, Dr. H. G. Rawdon has been elected Consulting Surgeon to this charity, which though, comparatively modern, is one of the most popular and best supported in the city.

THE POLICE AND AMBULANCE DUTY.

At a late hour on a Saturday night a local police inspector found a sailor lying in a low street drunk and with his right leg fractured. Procuring two pieces of wood, with which he made splints, he bandaged the broken limb, and conveyed the patient to the Royal Southern Hospital, where Dr. Allen, the resident medical officer, complimented him on the skilful way in which he had done his work. The officer is connected with the St. John Ambulance class.

IRELAND.

(From our own Correspondent.)

ROYAL COLLEGE OF SURGEONS IN IRELAND.

IN a recent number I stated that very little doubt existed that Mr. A. H. Corley, of the Richmond Hospital, would next month be duly elected the vice-president of the College. It is right, however, to mention that a rumour has prevailed that he would be opposed by a prominent and most influential member of the Council, one who has already occupied the post of president. If any opposition of the kind were to take place it would be a matter of great regret, as Mr. Corley has by fair and honest work qualified himself for the high position he seeks; and, his name having been before the electors since last June, unopposed, it would be very hard for him now to undergo the ordeal of a contest. However, so far as I learn, I do not think that any opposition will be shown to Mr. Corley's election as vice-president, and therefore hold my former opinion in reference to his candidature.—From the annual report recently issued it appears that during the past year 11 candidates were admitted Fellows, 122 became Licentiates, 12 received the diploma in midwifery, and 11 practising dentists received the dental diploma. At the last annual meeting of the Fellows, a resolution was adopted making certain alterations in the charter as to the method of electing professors and examiners, and this change has been carried out at recent elections. Two other important resolutions were adopted: one being that the charter should be altered so as to enable Fellows to record their votes for the election of the president, vice-president, and Council by voting papers; and the other that the Council should consider and adopt the best means for keeping the Fellows of the College acquainted with the proceedings of the Council and the business of the College. Neither of these has been carried into effect, and as the matter will be discussed at the meeting of the College on Saturday, the 31st inst., I shall not at present enter into the reasons adduced by the Council for not carrying out the express wishes of the Fellows at their last annual meeting.

QUEEN'S COLLEGE, CORK.

A special Visitation was held on the 15th inst. and following day. Its object was to inquire into the appeals from the sentences on students of the College by the Council for taking part in meetings held outside the institution in reference to the recent Parliamentary contest for the city, and also for being present or taking part in a meeting where the management of the College was a subject of discussion. The Visitors were the Right Hon. the Lord Chancellor, who presided, his Grace the Duke of Leinster, and the Presidents of the Colleges of Physicians and Surgeons. The students who appealed were Mr. Lynch, who had been rusticated to the end of the session, 1885; Mr. Hennessy, fined £30; and others with smaller fines. After a two days' investigation the Visitors held that the meeting of Feb. 22nd, of which Mr. Lynch was chairman, was a serious breach of discipline, and the sentence was confirmed. In the case of Mr. Hennessy there appeared some mitigating circumstances, and he has been permitted to retain his scholarship, but will be fined £2. The fines inflicted by the Council on Messrs. O'Callaghan and Kearney were confirmed; and that on Mr. McSweeny was remitted, as the latter had taken no prominent part at the meeting at which he admitted he had been present.

COUNTY KILKENNY CORONERSHIP.

The coronership of the Northern Division of the county of Kilkenny will take place this week. On Monday last the following candidates were duly nominated at the court house—viz., Drs. Mullaly, Brennan, Hackett, and Hourigan. An objection was made that some of the candidates had not handed in their qualifications, but this was over-ruled by the sheriff.

A SINGULAR SUPERSTITION.

Two women have been arrested at Clonmel for ill-treating a child three years of age. The poor thing had not the use of its limbs, and the neighbours believed it to be a "changeling" left by the fairies in place of the original child. These women entered the cabin while the mother was away and placed the child naked on a hot shovel, under the impression that by this means the charm would be destroyed. The child was severely burnt and is now in a precarious state.

The following have been appointed, by warrant of the Lord Lieutenant, commissioners to inquire into the working of the Queen's Colleges and the Royal University—Mr. Carton, Q.C.; Mr. G. Johnstone Stoney, F.R.S., formerly secretary of the Queen's University in Ireland; Rev. G. Molloy, rector of the Catholic University; Mr. Jack, of Glasgow University; and Deputy Surgeon-General Marston, of the Army Medical Department.

Dr. Mathias O'Keeffe, M.D., Professor of Materia Medica and Therapeutics at the Queen's College, Cork, died last week at his residence, Camden-place, Cork, after a short illness.

Dr. Woodhouse has been appointed an inspector under the Local Government Board, in the room of Dr. Roughan, deceased. He had previously acted as temporary inspector, and, therefore, had a sort of claim for the vacancy when it took place; but it would give more satisfaction generally if these appointments were principally recruited from the ranks of Poor-law medical officers in Ireland.

Dr. Yourelle has been elected Medical Officer of Dunboyne Dispensary, in the Dunshaughlin Union.

BERLIN.

(From our own Correspondent.)

THE banquet given to Dr. R. Koch and his companions, to welcome them on their safe return from Egypt and India, took place, on May 13th, in the spacious Winter Gardens of the Central Hotel (Friedrichstrasse). The general feeling was strikingly shown in the presence on the occasion of 600 physicians and sanitary officers, civil as well as military, and of the entire medical faculty. The members of the commission, Dr. R. Koch and Staff-Surgeons Gaffley (Prussian Army) and Fischer (German Army), wore the high war decorations conferred upon them by the Emperor, which the German Crown Prince had personally presented to them the third day after their arrival.

The first toast, that of the health of his Majesty, was proposed by Professor Dubois-Reymond, with his usual animation; he pointed out that remarkable deeds on the peaceful battlefield of art and science would be the best inauguration of the regained unity of the German nation, quite in accord with the feelings of her august Emperor, who always showed such lively interest in every advance made in this direction.

The president of the committee, Prof. von Bergmann, then proposed the health of the commission, saying that it was not the peerless gallantry and self-devotion nor the momentary success he desired to praise, but the whole manner of working, the undaunted assiduity, the unparalleled painstaking energy, and last, not least, the exactness of the methods employed.

The next speech of general interest was made by Rudolf Virchow, who, from a merely scientific point of view, congratulated the discoverer of the bacilli of cholera and tuberculosis for having reconquered for the old "science of physics," in the Cartesian sense, a vast territory, which up till now had been usurped by the botanists. He further dwelt upon the extraordinary and well-merited honours conferred upon the commissioners, honours which he claimed as granted to the whole profession, and which he thought would tend to raise its authority and self-esteem. In conclusion, he referred in a most lively and humorous way to his first meeting with Dr. Koch, then a "Kreisphysicus" (State physician) in a small country town.

After the reading of addresses from the Gesellschaft für oeffentliche Gesundheitspflege and the Verein für innere Medicin, by Professors Hirsch and Leyden, Dr. Koch rose to reply. He did not find anything extraordinary, he said, in the whole enterprise for a man who like himself had during twelve years been accustomed to deal with the germs of every kind of infectious diseases, although the death of Dr. Thuillier might show that such expeditions were not altogether without danger; he likewise did not find anything extraordinary in the discovery of the cholera bacillus, which sooner or later would have been made out of necessity, as a ripe fruit of well planned and exact methods of research. But he was satisfied to find some acknowledgment of his work upon the development of these methods. He was well aware that his discovery would not very much contribute to the improvement of therapeutics, but he believed that his experience in Egypt and India would allow him to make some practical propositions concerning the prevention of cholera; and perhaps, if only the Governments concerned would agree with his plan, it might be possible to check the disease upon its motherland, India. The success of such measures, it may be remarked, would guarantee to the distinguished German a position among the greatest benefactors of mankind, and for such a merit even the extraordinary honour of a public donation of 135,000 marks by Act of Parliament, just sanctioned by the German Diet, seems only a poor equivalent.

Berlin, May 14th, 1884.

RAILWAY VENTILATORS.—A compromise has, it is stated, been arranged between the Metropolitan Board of Works and the District Railway Company, in consequence of which the Bill before Parliament will pass as an unopposed measure. This agreement does not require the closing of the ventilators in the public gardens, but is simply directed to the removal or alteration of those which are a danger to carriage traffic, such as the one placed in the roadway of the Embankment.

THE DEATH-RATE IN NEW YORK.

(From a Correspondent.)

EFFORTS to explain the high rate of mortality in New York are made so industriously here that it may be worth while to throw some light upon it from a more independent standpoint than native patriotism affords.

Last year was unusually favourable, the mortality showing 3913 less than in 1882, and still the number of deaths was no fewer than 34,011. According to the census of 1880 the population was then 1,206,292, which gives us a death-rate of 28·19 per 1000. It is sought to palliate this bad showing by various excuses, among which there are two principal ones—first, that the actual population is now greater than that given in the census, and that in consequence the rate ought to be 25·81; and, secondly, that much of the mortality takes place in institutions. The latter of these allegations is of no consequence. In regard to it the position of New York is no worse, but probably a great deal better, than that of any other large city. Moreover, as the inmates of public institutions are allowed to swell the census returns, they tell both ways. The reference to population merits further notice. It is fair to assume that the residents in New York have increased since 1880, but not in the ratio indicated. That, however, I will pass by. The fact that the census return is inaccurate, and in excess of the truth, is more important. In the United States the census is not taken as it is in England. No day is fixed. On the last occasion it required fourteen months to get the returns in. Many of the persons whose names go on the census from their places of business in the city are non-residents, and they are put on record again in Brooklyn, or New Jersey, or Staten Island, or wherever they happen to live. I and my family were among the large number who were taken twice at the last census. Twenty-four per cent. of the members of the Stock Exchange are non-resident. In the Cotton Exchange the numbers are about the same. In the Produce Exchange, 60 per cent. of the members live out of town. The resident population of New York does not exceed 1,000,000. I doubt if it is so much, but the registration returns enable us to arrive at an approximation. The number of voters at the last election was 162,736, but the registry contains 182,531 names. It must be remembered that this is under manhood suffrage, so that very often there is more than the head of the family voting in one household. Nevertheless, we will multiply by five, and still we have only 912,655 as the total population. In view of the low average of American families—and two-thirds of all in New York are natives—it is almost certain that this is yet further in advance of the truth. But allowance has to be made for non-naturalised foreigners, although there are not so many of these as is generally supposed. The English as a nationality are among the least ready to abandon their privileges. Making then the necessary deductions and a liberal estimate for those who are outside of the registration lists, I am well assured that if we set the entire resident population of New York now at 1,000,000, we are estimating it too high rather than too low. It gives us 34·01 as the rate of mortality. To what is this high rate due? To bad drainage, bad water, bad air, bad food, imperfect sanitary measures, the herding together of many families in tenement houses and rookeries such as London cannot equal for filth and rottenness of every kind, and last, but not least, to the inefficiency of medical help. I say it advisedly, but emphatically, after several years of close observation in the United States that the rate of mortality generally, as well as in the city, would be very materially lowered if the standard of medical education were adequately raised.

New York, May 1st, 1884.

MEDICAL NOTES IN PARLIAMENT.

IN the House of Lords on Friday, the 16th, a petition from London was presented against altering the law relating to vivisection.

Smoke Abatement.

On Monday, Lord Stratheden and Campbell gave notice that on Monday next he would call attention to the means of abating smoke in the metropolis, and present a Bill on the subject.

Cholera Reports.

In the House of Commons on Thursday, a copy was presented of further reports respecting the cholera epidemic in Egypt, and the proceedings of the German Scientific Commission.

The Medical Bill.

The Medical Act Amendment Bill was brought down from the House of Lords, and formally read a first time on Friday. No day has yet been appointed for the second reading.

On Monday, Mr. Burt's Canal Boats Act Amendment Bill was read a second time, and referred to a Select Committee.

Soldiers' Widows.

Lord Hartington announced that in future the widows of soldiers killed in action, or dying on active service, would receive a pension of 3*s.* 6*d.* weekly, with 1*s.* 6*d.* weekly for each child, instead of the gratuity of a year's pay, which hitherto had been the only payment to them.

Small-pox in London.

Dr. Cameron gave notice to ask the President of the Local Government Board whether his attention had been called to the alarming increase of small-pox in London; whether revaccination of persons exposed to infection is regarded by his medical advisers as constituting a most effective mode of preventing the spread of the disease; whether, in London, it is the duty of local medical officers of health to report cases of small-pox to vaccinating officers, whose duty it is to inform public vaccinators, whose duty it is to send the persons concerned handbills informing them that on certain days, at certain hours, and in certain stations, they may, if they choose, be revaccinated without charge; whether he is aware that in Glasgow and other large towns all this circumlocution is avoided, and the medical officer of health personally looks after the isolation of small-pox cases, and sees that revaccination is promptly offered to all who have been exposed to the infection; and whether he will recommend the appropriation of a few hundred pounds to encourage medical officers of health in London to undertake the same work, and test whether outbreaks of small-pox in the metropolis may not be controlled as cheaply, speedily, and effectually as they have repeatedly been in Glasgow.

The Indian Medical Service.

Mr. Gibson on Tuesday gave notice to ask the Under-Secretary for India what is the proportion of officers of the administrative grade of the Indian Medical Department to that of officers of the executive grade; has the number of administrative grade appointments been diminished within the last few years; has a recent alteration been made of the limit of age for compulsory retirement, and has this affected promotion. On Wednesday Mr. Gibson postponed his notice to call attention to the grievances of the Indian medical service until June 17th.

Dwellings of the Poor.

Mr. Trevelyan, in a speech on the Labourers (Ireland) Act Amendment Bill, announced that the Royal Commission on the Dwellings of the Poor would extend its inquiries to Scotland and Ireland, and several gentlemen had been invited to join the Commission with that view.

Diseased Meat.

Mr. Gray gave notice to ask whether English boards of guardians sold for use as human food the carcases of cattle affected with pleuro-pneumonia, slaughtered under the provisions of the Contagious Diseases (Animals) Act.

Vaccination Penalties.

Sir G. Pease gave notice that on June 17th he would move a resolution for the abolition of cumulative penalties for non-vaccination.

New Spirits.

Mr. O'Sullivan gave notice that on the same day he would call attention to the evil effects of drinking new spirits, and move a resolution that no spirits less than a year old should be sold for consumption.

Dwelling Houses Inspection Bill.

During the week petitions against this Bill have been presented from Liverpool (2) and London (3).

Obituary.

EDWARD TWINING, M.R.C.S., L.S.A.

MR. EDWARD TWINING, of Walthamstow, was the son of the Rev. Daniel Twining, M.A., Rector of Therfield, Herts. He was educated at Uppingham School and St. Bartholomew's Hospital, and he passed the College and Hall in 1840. He was a distinguished student at St. Bartholomew's, and house-surgeon to the Westminster Hospital for Women. He married in 1846, Lucy, daughter of J. Cowan Parker, Esq., of Hull, and commenced practice in Hull, where he took a leading position as an able practitioner. He was on the staff of the old Hull School of Medicine, and was Lecturer on Forensic Medicine and Surgeon to the Sculcoates Hospital, which was associated with the school. On account of ill-health he was compelled to relinquish this important position and an excellent practice to go abroad. He very reluctantly went to Springfield, Canada, and in a congenial climate he practised for six years, and was a coroner and justice of the peace. His condition so improved that he decided to return to England, and shortly afterwards came to Walthamstow, where he has been in active practice for upwards of twenty years. Everyone in Walthamstow knew his determination and indefatigable zeal. All will remember the pains and interest he took over his patients, and how in his splendid and manly old age he never failed to be courteous and considerate to all with whom he came in contact. Mr. Twining took an active part in all the important institutions in Walthamstow, and was one of the original promoters, and from its very commencement till within a few weeks of his death one of the active officers, of the Walthamstow Town Dispensary. He was also an energetic worker on the committee of the public charities. During his long residence in Walthamstow he was ever a decided politician, and was invariably on the platform at the meetings of his party at the Town Hall. He was a staunch and liberal Churchman, but was nevertheless held in the highest esteem by those who differed from him.

Mr. Twining had for some time suffered from muscular weakness of the heart, which led to mitral dilatation. This condition induced a train of distressing symptoms, which were borne with exemplary resignation. Suffering from general dropsy, he passed away on May 12th at his residence, the Chestnuts. Dr. Andrew and Dr. Martin had been unremitting in their kind attendance during his illness. He leaves a widow and grown-up family to cherish the memory of a devoted husband and father. Outside his family circle many will lament the loss of a friend whose genial and kind disposition supplemented a useful and honourable life.

DAVID MANSON, M.A., M.D.

DR. MANSON, who died on the 9th inst. at Strathpeffer, at the early age of forty-five, received his medical education at the University of Aberdeen, where he took the degrees of M.D. and C.M., both with the highest honours, in 1862, having previously, in 1859, taken the degree of M.A. at the same university. Immediately after qualifying Dr. Manson practised in London, where he resided for two years. He was then appointed resident physician at Strathpeffer Spa, a position which he occupied until 1871, when he was induced to remove to a more lucrative practice in Chesterfield. In 1882, however, Dr. Manson returned to Strathpeffer, and devoted the remainder of his life to make the spa what he believed it was destined to be—namely, the foremost one in Britain. In 1866 he wrote a brief treatise on the spa, intended specially for the medical profession; and in 1869 he published "The Sulphur and Chalybeate Waters of Strathpeffer," the revision of the proof-sheets of the fifth edition of this work being one of the last of his labours.

THE ROYAL NATIONAL HOSPITAL FOR CONSUMPTION, VENTNOR.—A petition has been presented to Her Majesty in Council praying for the grant of a charter of incorporation to the Royal National Hospital for Consumption and Diseases of the Chest, on the separate or cottage principle, Ventnor, and has been referred to a committee of the Privy Council, by whom it will be taken into consideration on the 1st of July next.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the Primary Examination in Anatomy and Physiology at meetings of the Board of Examiners on the 17th, 19th, 20th, and 21st inst.:—

Hubert D. Mason, Norreys D. Best, Alfred W. Thompson, Edward F. Pratt, William Aston, Arthur D. Miller, J. M. Ehehardt, John Westwood, Edward Phillips, and Frank A. Parry, Birmingham; J. G. Johnson, C. P. Bullock, and J. B. Slyman, St. Bartholomew's Hospital; William J. Neale and John H. Lightbody, Liverpool; Edgar R. Lyth, Arthur Green, Edwin J. Booth, and H. B. W. Paige, Newcastle-on-Tyne; H. T. S. Aveline, Bristol; John W. Staniforth and Charles A. Ridal, Sheffield; George A. Webster, Cambridge; Herbert de C. Woodcock and Charles G. Jackson, Leeds; Shirley Roberts, Dublin; A. H. Johnston and M. E. A. Wallis, Guy's Hospital; A. A. Howell, London Hospital; Robert Dane and C. W. Edwards, Middlesex Hospital; H. H. Norton and P. L. Nettleship, St. Mary's Hospital; George W. Caswell, University College; E. W. Morris, St. Thomas's Hospital; E. Knight, Bristol and University College; G. M. Jones, Cambridge and Guy's Hospital; John F. Bridgwood, James F. Rymer, Enoch Moss, John L. Roberts, and Herbert E. Vincent, Guy's Hospital; Charles H. Dixon, St. Mary's Hospital; Chas. J. Holtom and John Melhuish, University College; Charles H. Hands and Alexander D. Louttit, St. Bartholomew's Hospital; James H. Cox, London Hospital.

For the First Professional Examination for the Fellowship, which commences this day (Friday), there are 98 candidates.

The annual courses of lectures, which were suspended during the examinations for the membership of the College, will be resumed on Wednesday, the 4th proximo, by Mr. Edward Albert Schäfer, F.R.S. The first of his three lectures will be on the Functions of the Marginal Convolution, the second on the Analysis of Voluntary Muscular Action, and the third on the Mechanism of Absorption. The lectures will be brought to a close by Sir Henry Thompson, F.R.C.S., who will commence his course of six lectures on some important changes in connexion with the Surgery of the Urinary Organs, on Wednesday, the 11th proximo. These several lectures will be delivered on Mondays, Wednesdays, and Fridays, at 4 o'clock.

APOTHECARIES' HALL. — The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on May 15th:—

Docker, Edward Scott, Clarendon Villas, Barnes.
Frye, Joseph Henry, Old Kent-road.
Gray, John Power William, Barnsbury Park.
Jones, Harry Shirley, Oak Hall, Bromsgrove.
Syrée, Anton Hugh, Canterbury.

The following gentlemen also on the same day passed the Primary Professional Examination:—

James Kearney, Queen's College, Galway; Wm. Tratman Wallington, Charing-cross Hospital.

THE fund being raised towards a memorial of the late Dr. Marion Sims now amounts to 4757 dols.

THE MEDICAL ACT.—On the 17th inst., the magistrate at the Westminster Police-court granted a case, for the opinion of the Superior Court, as to whether a defendant who was recently fined for falsely and wilfully pretending to be and taking the title of surgeon, but who had passed the examination in surgery at the Royal College of Surgeons, though he had not received his diploma, had wilfully and falsely described himself as surgeon.

BABY-FARMING.—Two women, named Emily Maria Brown, a laundress, and Sarah Markwell, her mother, have been convicted for neglecting to provide sufficient food and clothing for three infants who were under their custody and care, by which their lives were endangered. Under extenuating circumstances, the mother escaped with an imprisonment of fourteen days; while the sentence upon the daughter was an imprisonment of three months.

HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET.—The thirty-second annual meeting of the governors of this charity was held on the 21st instant. The number of in-patients admitted during the past year was 943, and the out-patients receiving advice and medicine amounted to 14,700. At the Convalescent Home at Highgate, 351 children were received during 1883. The available income of the hospital amounted to £8226, and legacies to the amount of £2880 were received. The total expenditure at both establishments was £10,500.

DR. DANFORD THOMAS held an inquest on the 22nd inst., at Colney Hatch, respecting the death of an inmate of the lunatic asylum, who died from injuries sustained by a fall. A verdict of "Accidental death" was returned.

A SHOCKING accident, resulting in the decapitation of a dock labourer named Denis Hickey, occurred on Wednesday at the Limerick Docks. A number of men were engaged in hoisting a derrick by means of a steam crane on board the steamer *Vale of Calder*, when some confusion ensued, and Hickey's coat was caught in the machinery. The man was whirled round, and the steel wire coiling around his neck, and pressing him against the axle, cut his head clean off before the crane could be stopped.

THE BRITISH HOME FOR INCURABLES. — The twenty-third annual general meeting of the governors and members of this institution was held on the 9th inst. The report of the board of management which was submitted to the meeting congratulated the governors and subscribers upon the improved financial condition of the charity as compared with past years, and referred with gratification to the fact that the amount of new annual subscriptions for the year was £334. Seven candidates out of an approved list of 117 were elected to the benefits of the institution.

AT Highgate Police Court on the 19th inst., William Newton, aged forty, warehouseman, of Lulot-street, Highgate New Town, a respectable-looking man, was charged on remand with feloniously and maliciously throwing a corrosive fluid—viz., sulphuric acid—over the face and clothing of his wife in Cemetery-walk, Highgate New Town, with intent to do her grievous bodily harm. The prisoner was committed for trial, bail being accepted, the prisoner himself in £20, and two sureties in £10 each.

PADDINGTON GREEN CHILDREN'S HOSPITAL.—At the first annual meeting in connexion with this institution, on the 15th inst., it was stated that the number of out-patients attended during the past year was 18,659. The number of in-patients admitted from August 16th to December 31st was seventy-five, of whom nearly one-third were under two years of age. The freehold of the hospital and adjoining premises has been purchased for £5250, and a debt of £2000 remains, which it is, however, hoped will be speedily liquidated.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.—The thirteenth annual dinner of this Society was held at the Holborn Restaurant, on Tuesday, May 20th, Mr. Michael Carteighe, President, occupying the chair. Dr. George Johnson, President of the Royal Medical and Chirurgical Society) in returning thanks for "The Learned Scientific Societies," alluded especially to two pharmaceutical agents which render invaluable assistance to the medical profession—anæsthetics and antiseptics; and Mr. A. E. Durham, President of the Medical Society, in replying to the toast of "The Medical Profession," acknowledged the help afforded them by the pharmaceutists. Dr. Lyons, M.P., returned thanks for the House of Commons, and Mr. D. Grant, M.P., Sir F. Abel, and Dr. B. W. Richardson for the guests. In addition to those named above, the large company included the following medical visitors, Dr. Farquharson, M.P., Prof. Michael Foster, Dr. C. J. Hare, Dr. Stevenson, Dr. Tidy, Dr. Lush, Dr. Langdon Down, Dr. Dowse, Dr. Ramsay, Dr. W. Cottle, and Mr. J. Smith Turner.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ASHWELL, FREDERICK, M.B., C.M.Ed., has been appointed Honorary Physician to the Sydney Hospital.

BAYNES, Mr. J., jun., has been reappointed Public Analyst to the Borough of Kingston-upon-Hull.

CUFFE, E. MEADE, M.B.Lond., M.R.C.S., has been appointed District Surgeon of Humansdorp, South Africa, vice Roy, deceased.

DAVIES, DAVID, M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health to the Stapleton Urban Sanitary District.

ELLIS, HYACINTH D'ARCY, M.R.C.S., has been appointed Medical Officer to the Second (Kingswinford) District of the Stourbridge Union.

GARLAND, ALBERT J., L.R.C.P.Ed., M.R.C.S., has been reappointed Medical Superintendent of the Oamaru Hospital, New Zealand.

GRAHAM, GEORGE H., M.R.C.S., L.R.C.P.Lond., L.S.A.Lond., has been appointed Medical Officer to the Workhouse and No. 2 District of the Thakeham Union, Storrington, Sussex.

GRIERSON, FRANCIS WALTER, M.B., C.M.Ed., has been appointed Resident Medical Officer to the Prince Alfred Hospital, Sydney.

HUGGARD, WM. R., M.D., has been appointed an Assistant-Physician to the West End Hospital for Diseases of the Nervous System, Paralysis, and Epilepsy, vice Dr. H. Tibbits, resigned.

JENKINS, EDWARD J., M.B.Oxon., M.R.C.P.Lond., M.R.C.S., has been appointed Resident Medical Officer to the Prince Alfred Hospital, Sydney.

MCNAUGHT, FREDERICK J., L.R.C.S.I., L.M., L.K.Q.C.P.I., M.B., has been appointed Medical Officer to No. 6 District of the Stow Union, vice Sherrington A. Gilder, L.R.C.P.Lond., L.S.A.Lond., resigned.

MAGUIRE, STANISLAUS, L.K.Q.C.P., L.R.C.S.I., has been appointed Medical Officer and Vaccinator for the District of Molong, New South Wales.

PESKETT, ALFRED T., M.R.C.S., L.S.A.Lond., has been appointed House-Physician to the London Hospital.

SINCLAIR, J., L.R.C.P.Lond., M.R.C.S., L.S.A.Lond., has been appointed Clinical Assistant to the Medical Out-Patient Department of the London Hospital.

SUTTON, Mr. FRANCIS, has been reappointed Public Analyst to the County of Norfolk.

UHTHOFF, JOHN C., M.D Lond., F.R.C.S.Eng., has been appointed Assistant-Surgeon to the Sussex County Hospital, vice H. Coulling, resigned.

WILLIAMSON, RICHARD FREDERICK, M.B., C.M.Edin., has been appointed Medical Officer to the Langwathby District of the Penrith Union.

Births, Marriages, and Deaths.

BIRTHS.

BARKER.—On the 13th inst., at Harley-street, Cavendish-square, W., the wife of Arthur E. Barker, F.R.C.S., of a daughter.

BARLOW.—On the 18th inst., at Alma Villa, 88, Dalston-lane, E., the wife of T. Carey Barlow, L.R.C.P.Ed., of a daughter.

BOSWELL.—On the 13th inst., at Ashburne, Derbyshire, the wife of Alexander Boswell, M.D., of a son.

COGHILL.—On the 11th ult., at Colombo, the wife of J. D. M. Coghill, M.D., Medical Inspector, Ceylon Civil Service, retired, of a daughter.

DAVIDSON.—On the 24th ult., at Kaira, Guzerat, India, the wife of David Charles Davidson, Her Majesty's Indian Medical Service, Bombay Presidency, of a daughter.

DRURY.—On the 19th inst., at Lingmoor, Dean-park, Bournemouth, the wife of William V. Drury, M.D., of a son.

FRASER.—On the 17th ult., at 7, Lower Church-road, Weston-super-Mare, the wife of Graeme B. Fraser, M.R.C.S.E., of a daughter.

MACDOUGALL.—On the 16th inst., at 4, Portland-square, Carlisle, the wife of John A. Macdougall, M.D., F.R.C.S.Ed., of a daughter.

WATSON.—On the 18th inst., at Tottenham, Middlesex, the wife of W. Tyndale Watson, M.D., of a son.

MARRIAGES.

COLLINGWOOD—JOB.—On the 17th inst., at Birkenhead, David Collingwood, M.D., B.S.Lond., F.R.C.S.Eng., late of University College, London, to Edith Elizabeth, younger daughter of Robert H. Job, of West Ridge, Oxton, Cheshire.

CRAIGIE—DENHAM.—On the 14th inst., at 27, Castle-terrace, Edinburgh, by the Rev. Archibald Scott, D.D., St. George's, James Stedman Craigie, M.B., C.M., Musselburgh, to Isabella Riddle Glover, eldest daughter of James Glover Denham.

WIGMORE—FITZGERALD.—On the 15th inst., at the Church of St. John the Evangelist, Bath, James Wigmore, M.D., of Twerton-on-Avon, to Catherine Elizabeth, widow of the late Dudley Loftus Fitzgerald, M.D., and only daughter of the late David Brown, Esq., of Lauriston, Clapham.

DEATHS.

ATKINSON.—On the 16th inst., at Richmond, Yorkshire, Mr. Richard Atkinson, M.R.C.S., L.S.A.Lond., aged 84.

EDDEN.—Recently, at Haughley, William Edden, L.S.A.Lond., Deputy Coroner for Suffolk, aged 60.

MURE.—On the 16th inst., at Tedworth-square, John Mure, M.D.Ed., Inspector-General of Hospitals (retired), formerly in the 7th Royal Fusiliers and 72nd Highlanders.

PARRISH.—On the 10th inst., at his residence, Wordsley, near Stourbridge, John Jones Parrish, in his 60th year.

SMITH.—On the 11th inst., at Ambleside, George Francis Kirby Smith, F.R.C.S., of Northampton, aged 37.

SPENCER.—On the 12th inst., at Whitchurch, Bucks, Charles Spencer, M.R.C.S., L.S.A.Lond., aged 73.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, May 22nd, 1884.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
May 16	30·07	S.W.	60	56	115	72	51	..	Cloudy
,, 17	29·85	S.W.	56	53	115	75	52	..	Overcast
,, 18	29·82	W.	58	51	92	63	50	·04	Cloudy
,, 19	29·90	E.	55	49	96	63	49	..	Overcast
,, 20	30·07	W.	54	47	100	66	47	..	Bright
,, 21	30·46	S.E.	55	48	107	71	45	..	Hazy
,, 22	30·46	E.	60	53	112	71	48	..	Bright

Medical Diary for the ensuing Week.

Monday, May 26.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

Tuesday, May 27.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 P.M., and Thursdays at 2 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION.—3 P.M. Professor Gamgee: Nerve and Muscle.

ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8 P.M. Mr. Theodore Bent: Notes on Remains from Cemeteries in the Island of Antiparos.—Mr. H. O. Forbes: The Koeboes of Sumatra.—Dr. J. G. Garson: On the Osteology of the Koeboes of Sumatra.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Dr. G. E. Herman: An Average or "Composite" Temperature Chart of Small-pox.—Dr. G. W. Cayley and Mr. A. Pearce Gould: Gangrene of the Lung treated by Drainage; recovery.—Dr. Cecil Y. Biss: On the Treatment of Pus-secreting Basic Cavities of the Lung by the Method of Paracentesis and Free Drainage.

Wednesday, May 28.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays, at 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1½ P.M.—Skin Department: 9.30 A.M., on Tuesdays and Fridays.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.

Thursday, May 29.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.

ROYAL INSTITUTION.—3 P.M. Professor Dewar: On Flame, &c.

Friday, May 30.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—8 P.M. M. E. Mascart: Sur les Couleurs.

Saturday, May 31.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Professor Bonney: Microscopical Geology.

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

LADY PRACTITIONERS IN ANCIENT ATHENS.

ONE of the very first of these was Agnodice, who, while yet a girl, was passionately fond of the medical art, and with a view to practise disguised herself in male attire, and attended the prelections of Hierophilus. When duly qualified, and still retaining man's clothing, she visited many patients, particularly females. The regular practitioners, who found themselves losing their *clientèle*, among women especially, cited her to appear before the Court of the Areopagus, where she was tried, and on the point of being condemned. At this juncture her female patients came forward, and gave evidence how much they, and through them the State, owed to her practice. The Athenians thereupon changed their law, and admitted freeborn females to become medical practitioners. The reader interested in the history of medicine may find these and other details as to the participation of females in the liberal professions in "Mulierum Graecarum quae oratione prosa usae sunt fragmenta et elogia Graece et Latine cum virorum doctorum notis et indicibus. Accedit catalogus feminarum sapientia artibus scriptisque apud Graecos Romanos aliasque gentes olim illustrium curante Jo. Christiano Wolfio in Gym. Hamb. Prof. P. Hamburgi, apud Abrahamum Vanderhoek, 1739."

Mr. Stanley Leighton is referred to a general notice at the head of this column.

Dr. Barrs (Liverpool).—If possible, next week.

MEDICAL ETIQUETTE.

To the Editor of THE LANCET.

SIR,—I regret not having seen Mr. De Gruyther's letter of May 10th until too late for a reply in your last impression. The facts of the case as regards myself and my assistant are these:—

Some time in the afternoon of April 23rd an urgent message was left at my house, asking me to go and see a woman in Brand-street who was dangerously ill. Not being at home at the time, my assistant went at once. On arriving at the house, he found a poor woman stretched across a wretched bed bleeding profusely, and was told by the midwife that she had only just been confined, that she was afraid of flooding, and that she could not personally restrain the hæmorrhage. On examination, the fundus of the uterus could be felt distinctly as high as the umbilicus; it was soft and flabby, and contained a large quantity of blood. The patient was prostrate from loss and evidently sinking. My assistant grasped the uterus firmly through the abdominal wall, emptied it of its contents, and, by continuous digital manipulation for some time, got the uterus to contract into its cannon-ball shape; a binder and compress were applied (no binder had been previously applied, as stated by Mr. De Gruyther). The hæmorrhage had now ceased; but in order to assist in keeping the womb contracted my assistant suggested to the midwife that the patient should have a dose of ergot. For the first time, there was now mention of a doctor having been previously in attendance, and a bottle of medicine was produced, whereupon my assistant said he would have nothing further to do with the case, and left.

Neither of us has seen the case since, nor have we in any way interfered with the doctor who first saw the poor woman. No fee was asked for and no fee has been received. The only reason that I can think of for the aged midwife calling me her doctor is that I have assisted her in a considerable number of difficult cases during the last fifteen years.

I think now, Sir, I may safely leave you to answer Mr. De Gruyther's queries contained in his letter of May 10th.

I am, Sir, your obedient servant,

May, 1884. GEORGE WIGHT, M.B., C.M., L.M. Edin.

PRIMARY EXAMINATIONS AT THE ROYAL COLLEGE OF SURGEONS.

THE Anatomical and Physiological examinations for the Membership of the Royal College of Surgeons were resumed on the 16th inst., when the following questions on Anatomy were submitted to the candidates, who were required to answer four, and no more, out of the six questions between 1 and 3 P.M.:—

1. Describe the course and distribution of the cutaneous branches of the three divisions of the fifth cranial nerve on the face.
2. Describe the origin, course, and relations of the portal vein. Mention the situations in which it communicates with the systemic circulation.
3. Mention the structures in contact with the interosseous membranes of the forearm and leg.
4. Describe the mesentery, its attachments, length, structure, and the parts contained therein.
5. Describe the dissection required to expose the flexor longus pollicis in the forearm.
6. Trace from the commencement to the termination the various constituents of the spermatic cord.

The following were the questions on Physiology, to be answered between 4 and 6 P.M.:—

1. Describe the functions of the grey and white substances of the spinal cord.
2. Describe the structure of a Graaffian follicle, and the maturation and discharge of an ovum.
3. What is meant by the partial pressure of a gas? What is the partial pressure of the oxygen in atmospheric air? How does expired differ from inspired air?
4. Give the innervation of the intrinsic and extrinsic muscles of the eye. State what would be the effect of the division of each of the nerves you mention.
5. Follow the successive stages of digestion which milk undergoes in the alimentary canal.
6. Describe the coloured corpuscles of the blood, and how they are affected by various reagents.

BURIED ALIVE.

To the Editor of THE LANCET.

SIR,—Will any of your readers give me the benefit of their opinion as to whether the following was a case of being buried alive? A woman of this town, aged seventy-three, was buried in our cemetery eleven years ago. The grave was bricked, and was made for two persons. A relative of hers has just died, and is to be buried in the same grave. The bricked grave being intended for two, there was a space of about ten inches between the woman's coffin and the stone slabs resting on the sides of the grave. When the gravedigger opened it, he was startled at finding that the lid of the coffin had been forced upwards against the stone slabs, leaving an opening in the coffin of about eight inches, the right arm and right leg of the woman's body hanging over the left side of the coffin, and her face lying sideways, or nearly downwards, the right knee being placed against the north side of the grave, outside the coffin. I know the woman well. Her friends say she suffered from asthma, and had a long illness, but that for two months before her death she was attended by no medical man. In the register of deaths the cause of her death is entered as "unknown." There was no medical certificate. Can any of your readers explain how the lid of the coffin could have been forced open? In this neighbourhood lids of coffins are usually fastened with screws. For reasons which I need not here mention, I think it possible that in this case the lid may not have been fastened at all. The body was kept in the house three clear days after death. I need hardly add that it seems to me that this is a matter of public interest. The possibility of people being buried alive is dreadful to contemplate.

I am, Sir, yours truly,

Vicarage, Llanelly, May 20th, 1884. DAVID WILLIAMS.

"ACADEMIÆ EDINENSI SALUTEM."

THE author of the Latin poem on the Tercentenary of Edinburgh University requests us to make the following correction of the fourth line:—"Namque loci Genius letato principe mœstus."

Subscriber.—The rule varies in different places. Our correspondent should ask his predecessor, or otherwise ascertain the custom of the place.

Mr. Lapage.—We think the name better omitted.

"A CAUTION."

To the Editor of THE LANCET.

SIR,—*A propos* of a letter in THE LANCET of Saturday last, a man called at my house last Sunday evening about 6.35. His knock being hurried, I answered quickly. He queried, "Are you Dr. Tily? Will you be at home in ten minutes? I have a young lady some distance from here who wishes to consult you. I will bring her in ten minutes." He did not bring her; and recollecting that his appearance corresponded with the description of the man named in the caution, I was very glad he was not shown in to wait. I am, Sir, yours obediently,

Chiswick, May 20th, 1884. JAMES TILY.

MEDICAL ETIQUETTE IN LIMERICK.

AN unhappy difference has arisen between Mr. Butler, the medical officer of the hospital of the Limerick Union, and Mr. Myles. Mr. Myles was interested in the nature of a case which had been admitted into the hospital, the more so as Mr. Butler had taken a different view of it from that of Mr. Myles. Mr. Myles called to satisfy himself more fully on the point of diagnosis. He sent his card to Mr. Butler. As he did not come, after waiting twenty minutes Mr. Myles saw the case, and, Mr. Butler says, examined it in an unprofessional manner. We think it would have been well for Mr. Myles to have waited, or to have taken another opportunity of seeing the patient with Mr. Butler. He should have consulted that gentleman's convenience. But Mr. Butler uses some very hard words in his version of the facts, which, we think, are uncalled for, and which greatly raise the temperature of a discussion like this, and prevent an amicable solution. There must be occasional differences, even on points of diagnosis; but that is no reason why two medical men should not meet in consultation, even in Poor-law hospitals. It was, rather, a very strong reason why they should meet, and either agree or agree to differ.

Dr. Vandyke Carter (Bombay).—A notice of the memoir appeared in our issue of April 19th, p. 717.

M. K. Futakami.—We cannot extend our exchange list.

CONSULTING SURGEONS AND CONSULTING PHYSICIANS.

To the Editor of THE LANCET.

SIR,—I venture to ask your powerful assistance in a matter which seriously affects the position of the consulting physician. It is quite notorious that consulting surgeons frequently usurp the functions of their medical colleagues. I could name many surgeons of repute who habitually attend cases which legitimately belong to the physician. This is unfair, not only to the physician, but also to the patient. For example: A, the patient, consults B, an eminent surgeon, on account of symptoms which the latter declares to be due to "congestion of the liver." He prescribes and takes a guinea. The injustice to C, the consulting physician, is evident. C is subsequently summoned, and finds the disease is really biliary colic. This is not an ideal case, but actually occurred in my own experience. Now B, both as a matter of etiquette and, which is of greater moment, of justice to the patient, has no right to pretend to special skill in a medical case, which he tacitly does by accepting a consultant's fee.

The evil of which I complain is widespread among surgeons, and to young physicians is a matter of the greatest concern. Their position is, I venture to say, worse than the junior barrister. He, at any rate, is not outbidden by his senior colleagues. The young physician is compelled by the unwritten code of his profession to take nothing under a guinea—the fee commonly charged by the usurping surgeon and the senior physician. If the former would only keep within his own province, and the latter raise his fees to a just amount, there would be more scientific work done in the profession, and the junior members would have no cause of complaint.

I am, Sir, your obedient servant,

May 14th, 1884. A YOUNG PHYSICIAN.

THE MILES FUND.

THE following subscription has been received at THE LANCET Office on behalf of the above:—B. Duke, Clapham, £2.

Dr. Mackenzie Booth.—Soon.

Mr. A. Gibson Jalland is referred to our advertising columns.

A WARNING.

To the Editor of THE LANCET.

SIR,—Would you kindly insert in THE LANCET the following description of a man who goes about the country calling on medical men and others soliciting aid? He falsely and most impudently represents himself to be Dr. MacLennan, Widnes, Lancashire. I have had several letters from gentlemen resident in Liverpool, Manchester, Belfast, and on Saturday last from Sheffield, either kindly putting me on my guard, or asking me to refund money which they were foolish enough to give the man. In the last communication I have had he is thus described:—"A tallish man, shabbily habited in a loose grey suit and high hat. He spoke with a slight Scotch accent. He appeared to know something concerning Edinburgh celebrities, running over a list of names and places with parrot-like fluency. He said that his mother resided at Inverness, that his brother was in a northern bank, and that his father-in-law was a staff officer." It is the invariable rule of the man to give the above history.—I am, Sir, yours truly,

D. URQUHART MACLENNAN, M.D. Edin.

Widnes, Lancashire, May 19th, 1884.

IODOFORM SPRAY.

To the Editor of THE LANCET.

SIR,—Would you oblige me by inserting the following query in the next issue of THE LANCET? Can any reader suggest some means of using iodoform in the form of a spray?

I am, Sir, yours obediently,

The Firs, Llantrisant, May 21st, 1884. W. N. DAVIES.

MEDICAL TOUTING EXTRAORDINARY.

WE learn that the following letter has been addressed to some members of the profession in London and of the chief provincial towns:—"Very honoured Colleague,—I am glad to inform you, I became a Consulting Physician at ——— several years ago, and in such a capacity I solicit from your kindness to address to me the patients to whom you advise this Thermal Station. So many diseases derive benefit from the use of these waters—scrophula, &c. &c.—that it is easy to find a patient to use them. I will feel grateful for whatever you do to my advantage, and promise to pay you £1 for every patient coming under treatment through your kindness. Believe me, my honoured colleague, very sincerely yours, ———." We need hardly add that the writer of this insulting letter is a physician—save the mark!—at one of the continental baths. We have received a number of letters from practitioners in different parts of the country enclosing copies of the same circular. We purposely omit giving the name of the baths, as well as that of the consulting physician.

Miss Dwyer.—Any report we may publish of the establishment will be the result of our own investigation.

Mrs. M. S. Butler.—We fear we should be unable to find space for the articles mentioned.

DEFICIENCY OF ANUS.

To the Editor of THE LANCET.

SIR,—The following case being unusual, and in my experience unique, is my excuse for sending it for publication.

On Feb. 2nd, 1884, I was requested to attend to a child who had been born two days previously without an anus. Next morning I went, and found the child in a coolie hut, in the usual state of dirt and nakedness. On examination I could find no anus. I resolved on trying to make an artificial one; and after passing the knife nearly two inches cautiously without reaching the bowel, I plugged the opening I had made and left it, as I was pressed for time and the surrounding circumstances were unfavourable for trying to make an opening in the loin. I heard repeatedly afterwards that the child was alive, and that it "took the breast, but passed nothing." My other work prevented me returning till the following Monday (Feb. 11th), when I was informed that the mother had left home on the Saturday previous, returning on the Sabbath with the child dead. I had the body taken to the Central Hospital, and made an inspection of it, when I found the surface of the abdomen slightly discoloured. On opening it I found the bowels slightly inflamed, and the kidneys congested; the contents of the abdomen were otherwise healthy. The caput cæcum lay higher than usual on the right side, and the descending colon, just before reaching the crest of the ilium, passed from the left to the right side, and again bent towards the middle line, ending in a cul-de-sac, with a fibrous-looking, very fine tube projecting from it, and forming a connecting-link between the end of the bowel and the neck of the bladder. A No. 1 catheter passed from the bowel through this fibrous tube into the bladder. The neck of the bladder was adherent to the sacrum at the upper part in the middle line; its base was adherent to the inner and under surface of the pubes, and a fibrous wing, as it were, from each side of it connected it with the sides of the pelvis, and separated, as with a curtain, the abdomen from the pelvic cavity. I found that my incision in search of the bowel had nearly reached the neck of the bladder (about one-eighth of an inch short of it); but as the neck of the bladder lay between the knife and the bowel, further penetration might have done harm, but could not have been beneficial. On opening the bladder I found a few drops of fæcal liquid.

Should I ever again be called to such a case (black or white), I will endeavour to see the nature of the contents of the bladder.

I am, Sir, yours faithfully,

Victoria Colony, Natal, March 29th, 1884. JOHN MCINTYRE, M.D.

"TREATMENT OF SPINA BIFIDA BY LIGATURE."

To the Editor of THE LANCET.

SIR,—The case of spina bifida cured by ligature published in your issue of last week is very interesting, and corresponds exactly with a case reported by me in THE LANCET in 1870. All I have to add is that my patient is now a hale and strong boy, the only remains of the tumour being a space about the size of one's palm, covered with long hairs, on his back.

I am, Sir, yours very truly,

The Hollies, Southport, May 20th, 1884. JAMES WEAVER, M.D.

TREATMENT OF CHOREA BY ERGOT.

To the Editor of THE LANCET.

SIR,—In THE LANCET for March 29th, 1884, appeared a letter from Mr. Richard Watts White on the ergot treatment of chorea, in which he cites a successful case. I had a case in which the usual symptoms were present, especially of the face and neck, and in which all ordinary remedies utterly failed. I put the patient on liquid extract of ergot (twenty drops three times a day), with almost immediate relief. As one of his relatives expressed it, "That last medicine worked like a charm."

I am, Sir, very truly yours,

Honesdale, Pa., U.S.A., May 7th, 1884. C. E. FOSTER, M.D.

AN ANTI-TEETOTAL PEDESTRIAN.

A SCOTCH pedestrian, "Bob Carlisle" by name, proposes to surpass Weston by walking 5100 miles in 100 days on anti-teetotal principles. Mr. Weston walked 5000 miles.

"SPANISH MORTALITY STATISTICS."

To the Editor of THE LANCET.

SIR,—In the article on the above subject which appeared in your issue of May 10th, page 865, you say: "The bulletin gives no clue to the registration machinery by which the facts are registered and transmitted to the Sanitary Department of the Home Office, by which it is issued. It is not therefore easy to estimate the true value of the statistics." I beg to offer this clue by the following statement. In every case of death the attending physician has to sign a certification of death (*papeleta de defuncion*) in duplicate, indicating the cause as well as the reality of death, the formula being—"Died of ———, and presents signs of decomposition." Without such a document there is no interment. One of the two copies is deposited in the office of the Civil Registrar of Municipalities, weekly returns of which are forwarded to the Statistical Departments of the Civil Governments of the Provinces, which, in their turn, transmit the statistics to the Director-General at Madrid. Thus the mortality statistics are founded entirely and exclusively on medical certifications, and are trustworthy as far as medical diagnostics are reliable.

You say: "Spain publishes, and has published for nearly two years, a bulletin, &c." This is not quite correct, as the bulletin has been published ever since September, 1879. Vital statistics were introduced into Spain by Professor Letamendi, editor of *La Salud*, in 1877, whose classification is still adopted as it was first published in *La Salud*, after the model of the "Mittheilungen des Kais. Gesundheitsamts." But the real founder of our statistics and of the monthly bulletin was Senor Castor Ibanez de Aldecoa, then governor of this province, and afterwards Director-General of the Sanitary Department, a man of indefatigable energy and perseverance, who, although out of office now, is an active member of the Madrid Society of Hygiene.

I am, Sir, yours truly,

Barcelona, May 13th, 1884. DR. SENTINON.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Bell, Uppingham; Dr. Hughes Bennett, London; Dr. Cameron, Glasgow; Mr. Reginald Harrison, Liverpool; Dr. Eades, London; Mr. Pretty, Haughley; Mr. Pemberton, Birmingham; Dr. Broadbent, London; Dr. Sinclair Thomson, London; Dr. Brabazon, Bath; Dr. Dobbin, Banbridge; Mr. H. C. Burdett, London; Dr. Mackintosh, London; Dr. Weaver, Southport; Mr. G. Wight; Dr. J. Macaulay, London; Mr. Mitchell Roocroft; Rev. B. Lambert, Greenwich; Mr. W. Moxon, Matlock Bridge; Dr. C. S. Taylor, London; Dr. W. N. Davies, Llantrisant; Dr. W. J. Collins, London; Dr. Heslop, Birmingham; Mr. E. M. Little, London; Mr. E. Wooton, London; Mr. S. Osborn, London; Dr. Sentiñon, Barcelona; Dr. C. E. Foster, Honesdale, U.S.A.; Mr. F. Treves, London; Mr. P. Thornton, London; Dr. Champneys, London; Mr. Graham, Wigan; Dr. R. Caton, Liverpool; Dr. Munro, South Shields; Mr. Pitman, St. Leonards; Mr. K. Futakami, Tokio; Mr. Douglas, Cupar Fife; Dr. C. B. Fox, Ilfracombe; Mr. Kesteven, Holloway; Dr. Barrs, Liverpool; Dr. Tripe, London; Miss Dwyer, Newbury; Dr. Steele, Rome; Mr. E. Prideaux, Wellington; Mr. Scott, Manchester; Dr. Robertson, Kimberley; Mr. Tegetmeir, London; Mr. Hugh A. Fergusson, London; Mrs. Butler, London; Dr. Mundie, Kingston-on-Thames; Mr. Thompson Lowne, London; Mr. W. Whitehead; Messrs. Rowland and Plumber, Maidenhead; Messrs. Douglas and Mason, Edinburgh; Mr. Gledhill; Mr. H. Kimpton, London; Mr. Blore, Leeds; Mr. Pentland, Edinburgh; Messrs. Wright and Co., Birmingham; Mr. Raspini; Mr. Owen, Tue Brook; Mr. Armstrong, Manchester; Mr. Morgan, Horncastle; Dr. Parsloe; Mr. J. Carter, London; Mr. Mosse, Frankfurt-on-the-Maine; Mr. Nash, London; Mrs. Markham, Portsmouth; Mr. Mercier, London; Mr. Poole, Dudley; Mr. Teague, Manchester; Mr. Lewis, Birmingham; Mr. Fenwick, Dunston; Mr. Twyford, Hanley; Dr. Blandford, London; Mr. Briscoe; Mr. Jaques; Mr. Byrne, London; Messrs. MacLehose and Sons, Glasgow; Dr. Ewart, London; Mr. Saxon Snell, London; Mr. Sydney Jones, London; Dr. McKinney, London; Mr. Blackett, London; Mr. J. A. Williams, Zanzibar; Dr. Strahan, Northampton; Mr. Donovan, Cork; Mr. B. Jones, Leigh; Dr. McLennan, Widnes; Mr. Makuna, London; Mr. Hastie, London; Professor Gray, Bombay; Dr. Hilliard, Aylesbury; Mr. Jalland; Mr. Barford, Wokingham; Mr. Gibson, Netherby; Mr. Sandford, Storrington; Dr. David Williams; Professor Lyon, Bombay; Messrs. Harris and Co., Birmingham; Dr. Crombie, North Berwick; Mr. Richmond, Chester; Mr. Webb, Bury; A Young Practitioner; Achates; Mrs. B., Leatherhead; A Graduate this month; Ignoramus; Care; M.D., Durham; Sanitas; Manchester; L.R.C.S.I., L.K.Q.C.P.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Palin; Mr. Gant, Hastings; Mr. Lacy, London; Dr. Lovell, Bradford-on-Avon; Mr. J. Low, London; Mr. Newton, Liverpool; Dr. Eberle, Thirsk; Miss Moon; Mr. Denham, Edinburgh; Dr. Rice, Derby; Mr. Frant, Birmingham; Dr. Ellis, Eastbourne; Mr. Whittaker, Derby; Dr. Heelas, Hampstead; Dr. Duke, Clapham; Mr. Middleton, Aylesbury; Miss Littlichau, Holloway; Mr. Ashmead, Brierley Hill; Mr. Smith, Halifax; Mr. Collingwood, Windermere; Mr. Blaxley; Mr. Watson, Oldham; Messrs. Macmillan and Co. London; Mr. Rigg, Sevenoaks; Dr. McDougall, Carlisle; Mr. Fraser, Weston-super-Mare; Mr. Staddon, Ipswich; Mr. Beaton, Lingwor; Messrs. Austin and Son, Clifton; Dr. Morris; Mr. Shaw, Chesterfield; Mr. Richards, London; Messrs. Goddard and Massey, Nottingham; Mr. Dickenson, Huddersfield; Messrs. Christy and Co., London; Messrs. Butterfield and Son, Northampton; Mr. Hume, Leamington; Mr. Hopkins, Camberwell; Mr. Fletcher, Manchester; Messrs. Lee and Nightingale, Liverpool; Mr. Barff, London; Mr. Thomas, Nantymoel; Dr. Bower, Bedford; Mr. W. Adams, London; Mr. Woodcock; Mr. Fielden, Chichester; Mr. Turton, Bury; Mrs. Ernst, London; Mr. Measles, Glasgow; Mr. Rowman, Towyn; Mr. Storer, Nottingham; Mr. Sherwood, Eastbourne; Mr. F. Jordan, Birmingham; Mr. Schofield; Messrs. Savory and Moore, London; Dr. Morton, Kilburn; Mr. Gray, Maidstone; Mr. Hyde, Buxton; The Registrar, King's College of Physicians, Ireland; Atlas; M. S., Clapton; Medicus, Pentre; Surgeon; Quis; Dr. M., Cromer; Matron, Sheffield; J. F. R.; R. P.; C.; Festina Lente; B., Nottingham; Principal, Turnham-green; R. S. V. P.; L.R.C.P., Ottery St. Mary; D. W.; H. G. B., Enfield; Medicus, Dublin; J. W., Leicester; Medicus, Leeds; R. G. P.; F. A. M., London; X. M., Croydon; L. M. P.; Julius; Country Doctor, Swansea; Medicus, Barnsbury; Medicus, Trow; Medicus, Newcastle-on-Tyne; Assistant, Sheerness; Zero; L. S. A., Baschurch; W. S. W.

Islington Gazette, Liverpool Courier, Bucks Advertiser, Northwich Guardian, South Durham Herald, Calcutta Englishman, Brighton Daily Post, The Debater, Kimberley Diamond Fields Advertiser, Jewish Chronicle, American Druggist, &c., have been received.

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